

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Baltimore, et al.

Serial No: To be assigned

Filed: January 4, 2002

For: Nuclear Factors Associated with
Transcriptional Regulation

Attorney Docket No. APBI-P05-035

Art Unit: To be assigned

Examiner: To be assigned

Assistant Commissioner for Patents
U.S. Patent and Trademark Office
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Please enter the following amendment:

In the specification:

Please replace the only complete paragraph under the heading Related Applications on page 1 with the following text:

This application is a continuation of Serial No. 08/464,364, filed June 5, 1995, which is a divisional of Serial No. 08/418,266, filed April 6, 1995, which is a continuation of 07/791,898, filed November 13, 1991, which is a continuation-in-part of application of Serial No. 06/946,365 (WHI86-10), filed December 24, 1986, and of Serial No. 07/318,901 (WHI87-11A), filed March 3, 1989, and of Serial No. 07/162,680 (WHI87-11), filed March 1, 1988, and of Serial No. 07/341,436 (WHI89-02) filed April 21, 1989, and of Serial No. 06/817/441 (MIT-4167), filed January 9, 1986, and of Serial No. 07/155,207 (MIT-4167A), filed February 12, 1988, and of Serial No. 07/280,173 (MIT-4167AA), filed December 5, 1988. The contents of the ten referenced applications are incorporated herein by reference.

The replacement paragraph presented above incorporates changes as indicated by the marked-up version below.

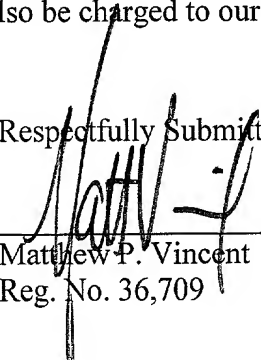
This application is a continuation of Serial No. 08/464,364, filed June 5, 1995, which is a divisional of Serial No. 08/418,266, filed April 6, 1995, which is a continuation of 07/791,898, filed November 13, 1991, which is a continuation-in-part of application of Serial No. 06/946,365 (WHI86-10), filed December 24, 1986; and of Serial No. 07/318,901 (WHI87-11A), filed March 3, 1989; and of Serial No. 07/162,680 (WHI87-11), filed March 1, 1988; and of Serial No. 07/341,436 (WHI89-02) filed April 21, 1989; and of Serial No. 06/817/441 (MIT-4167), filed January 9, 1986; and of Serial No. 07/155,207 (MIT-4167A), filed February 12, 1988, and of Serial No. 07/280,173 (MIT-4167AA), filed December 5, 1988. The contents of the ~~seven~~ten referenced applications are incorporated herein by reference.

Although Applicant believes no fees are needed in connection with filing this Preliminary Amendment, should fees be due in connection with the filing of this Amendment, please charge the fees to our **Deposit Account No. 18-1945**. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit account.

Date: January 4, 2002

Customer No: 28120
Docketing Specialist
Ropes & Gray
One International Place
Boston, MA 02110
Phone: 617-951-7739
Fax: 617-951-7050

Respectfully Submitted,


Matthew P. Vincent
Reg. No. 36,709

TRANSMITTAL OF FORMAL DRAWINGSDocket No
APBI-P05-035In Re Application Of: **Baltimore, et al.**

Serial No.

Filing Date

Batch No.

Examiner

Art Unit

To be assigned

Herewith

To be assigned

To be assigned

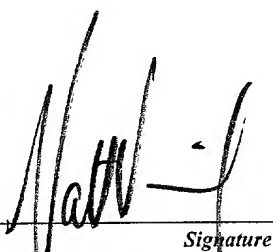
To be assigned

Invention:

Nuclear Factors Associated with Transcriptional RegulationAddress to:
Assistant Commissioner for Patents
Washington, D.C. 20231

Transmitted herewith are:

58 sheets of formal drawing(s) for this application.

Each sheet of drawing indicates the identifying indicia suggested in 37 CFR Section 1.84(c)
on the reverse side of the drawing.
*Signature***Matthew R. Vincent**
Registration No. 36,709
Ropes & Gray
Patent Group
One International Place
Boston, MA 02110**Customer ID 28120**Dated: January 4, 2002

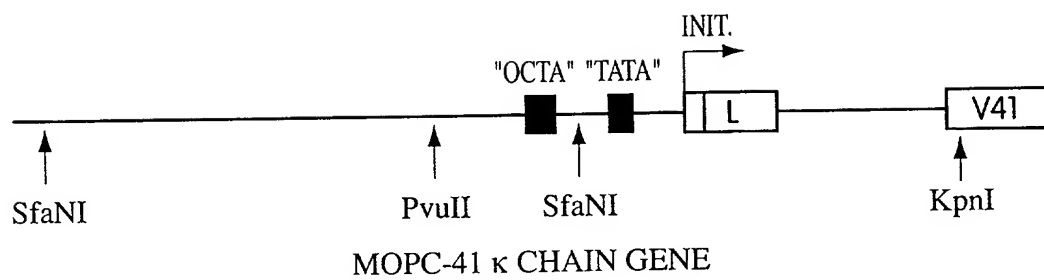


Fig. 1A

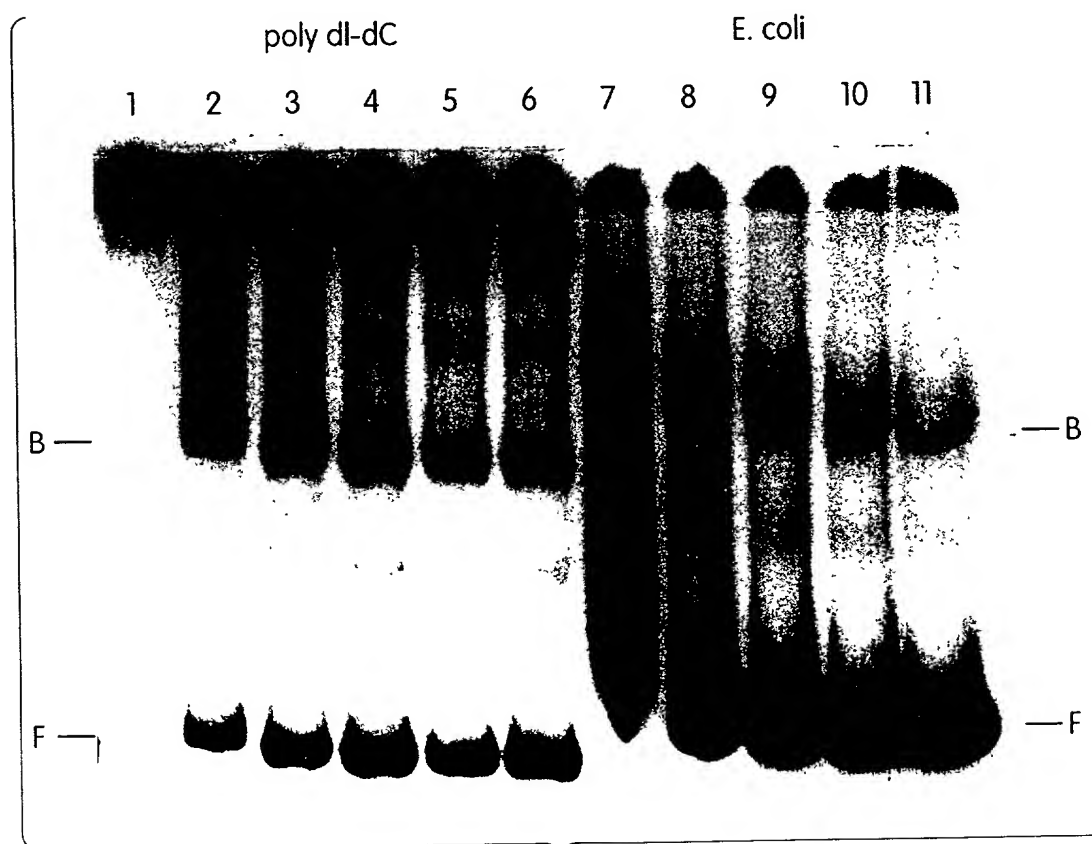


Fig. 1B

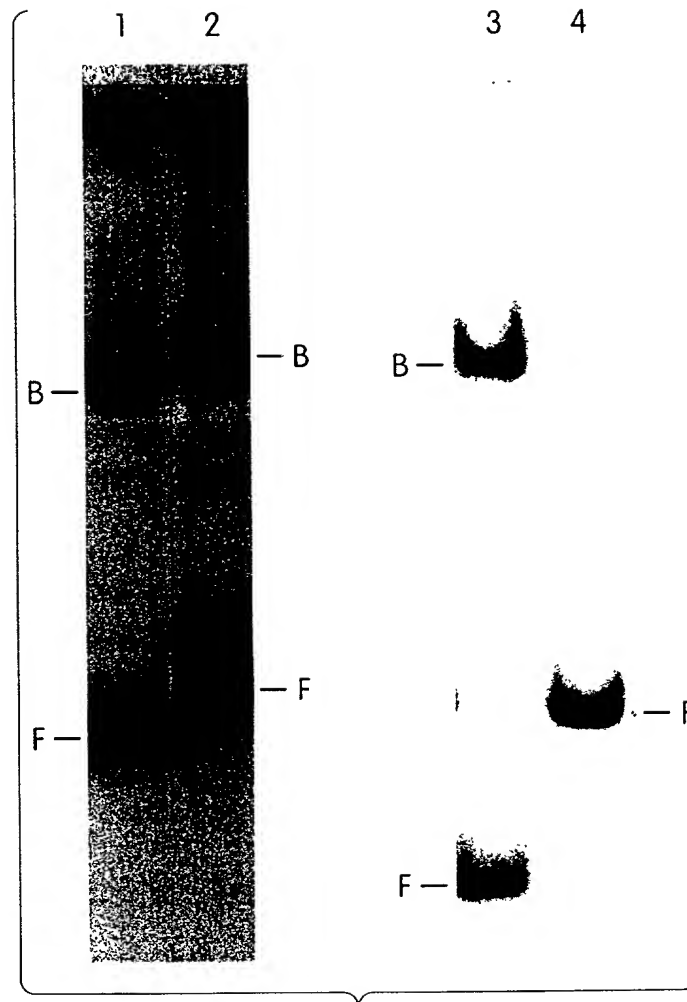


Fig. 1C

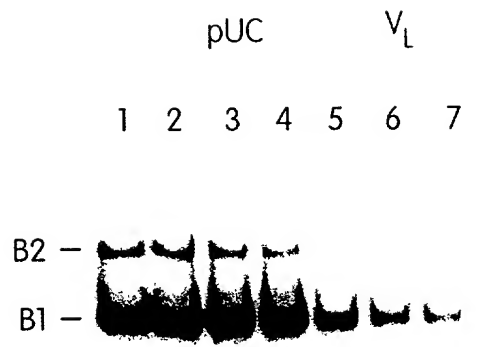
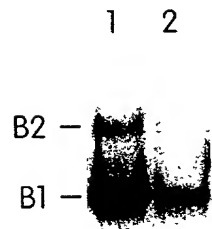


Fig. 2A



HeLa

Fig. 2B



Fig. 3

	*		*
V _L coding strand (-66)	TCTTAATA	ATTTGCAT	ACCCTCAC
V _H non-coding strand (-50)	CGCACATG	ATTTGCAT	ACTCATGA
J _H - C _μ coding strand (166)	CCTGGGTA	ATTTGCAT	TTCTAAAA

Fig. 4A

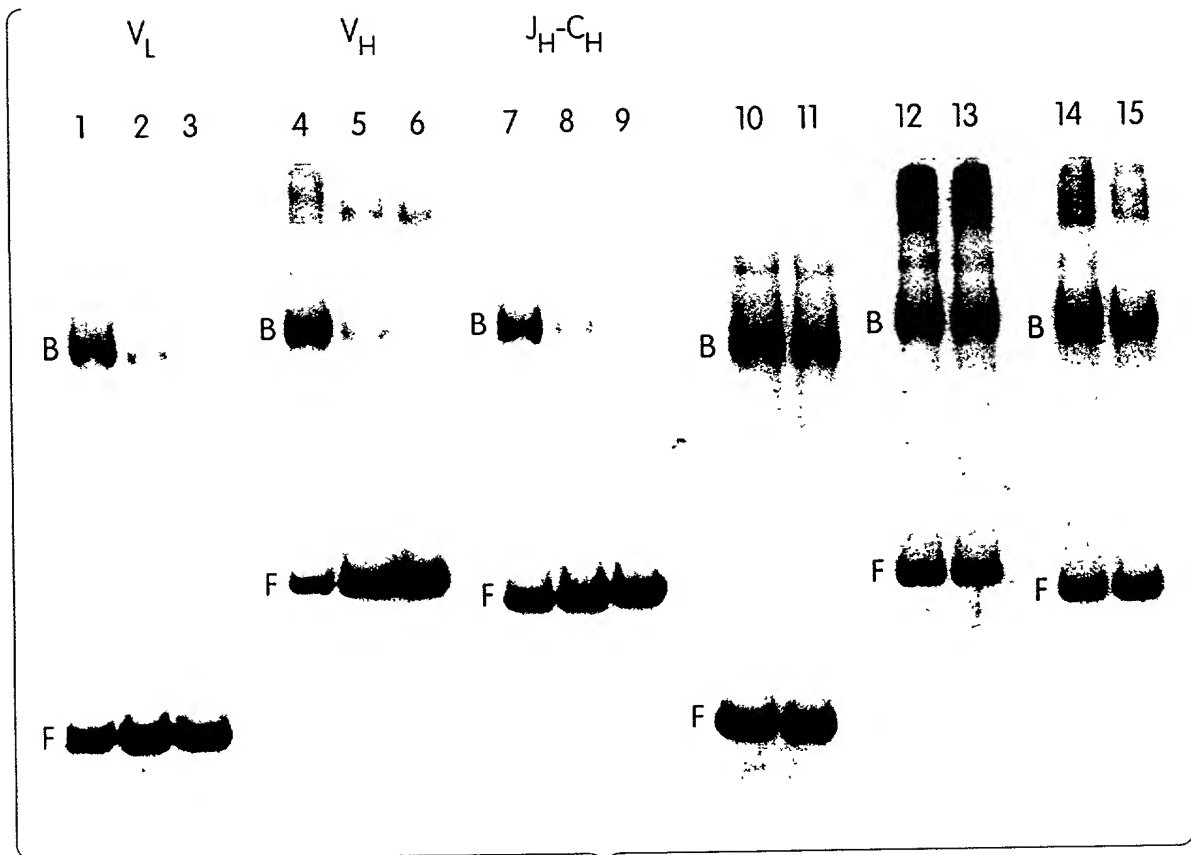


Fig. 4B

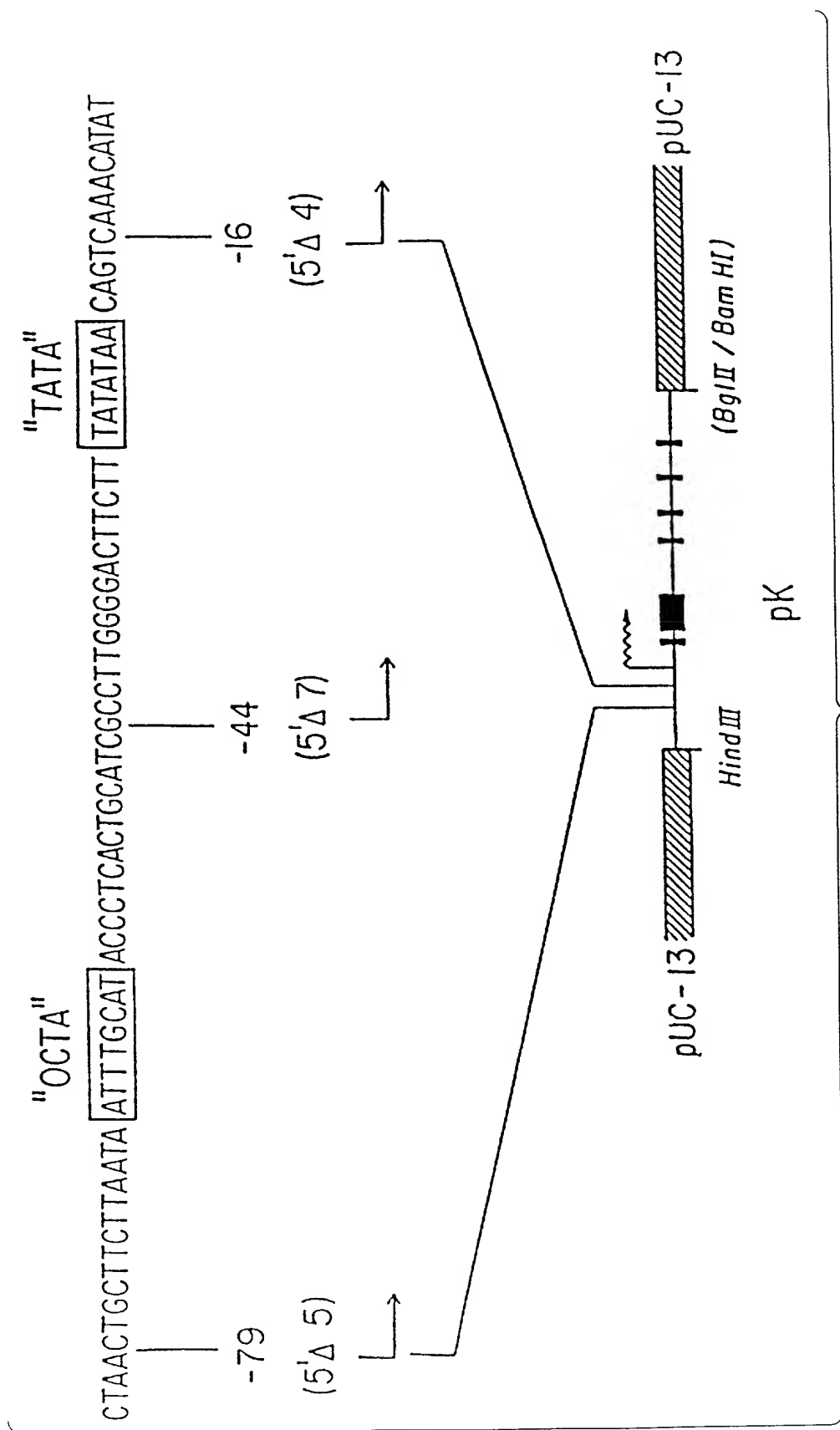


Fig. 5A

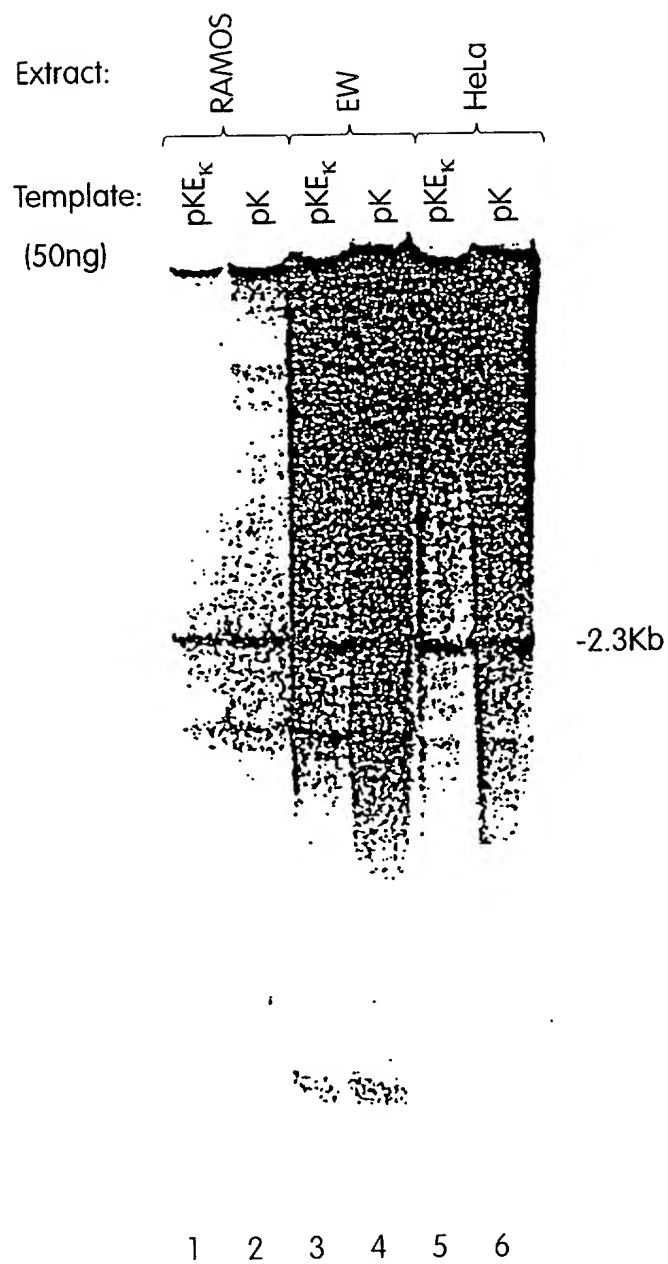


Fig. 5B

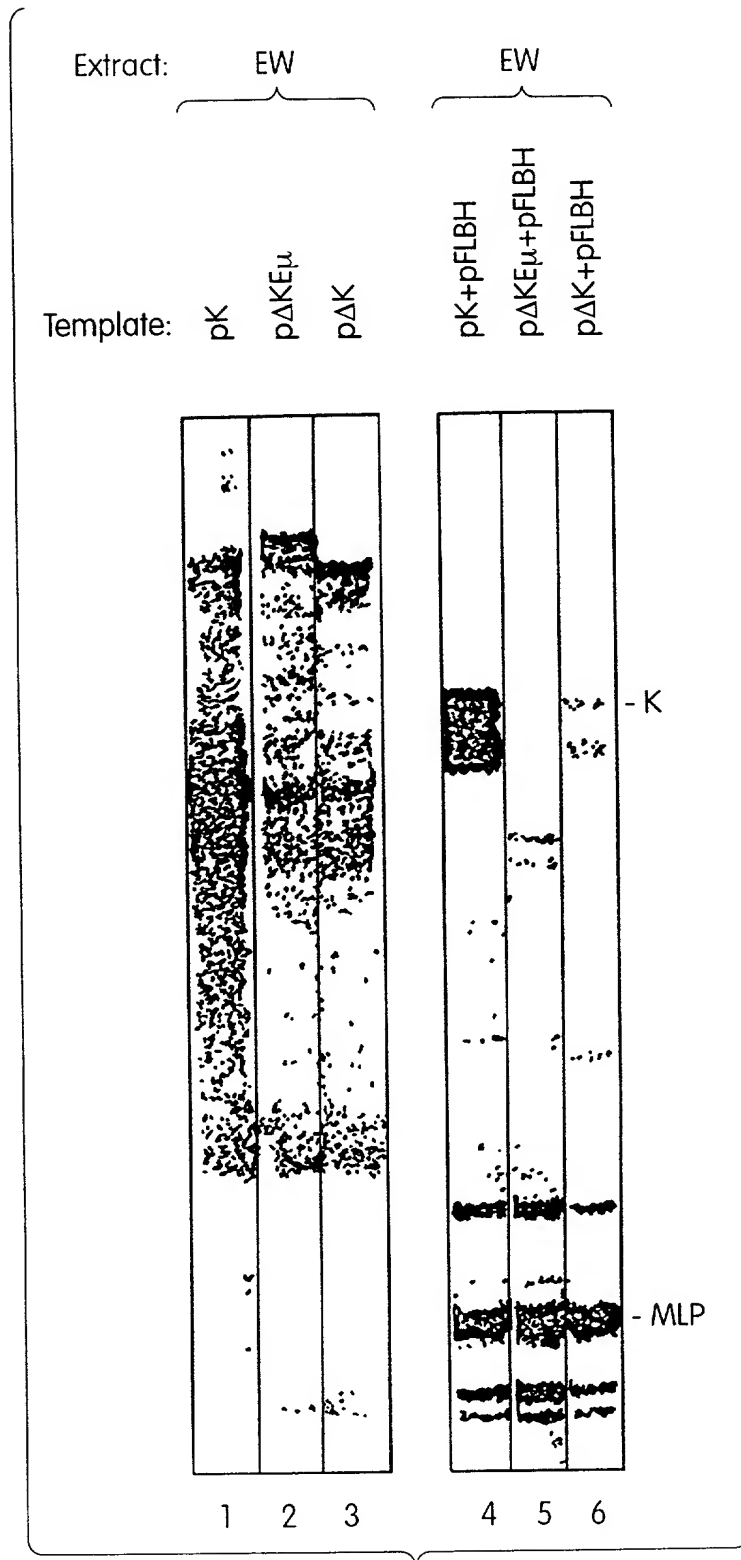


Fig. 6

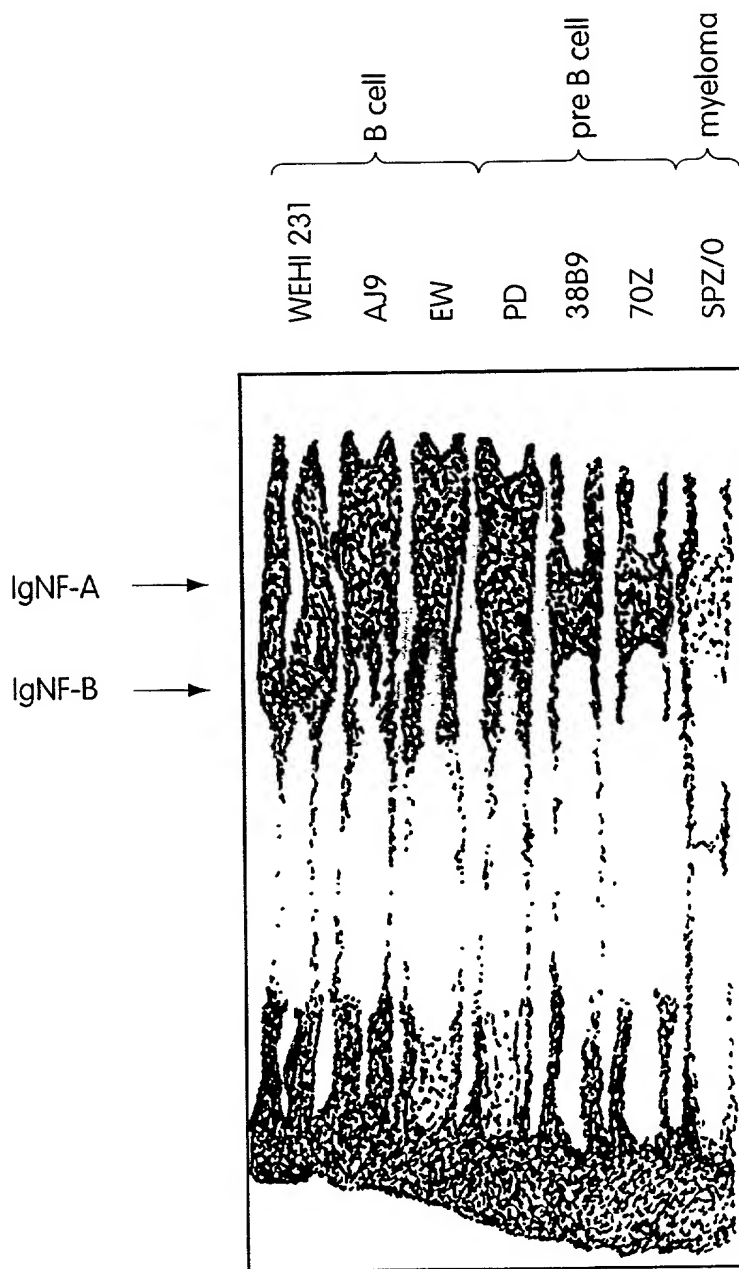


Fig. 7

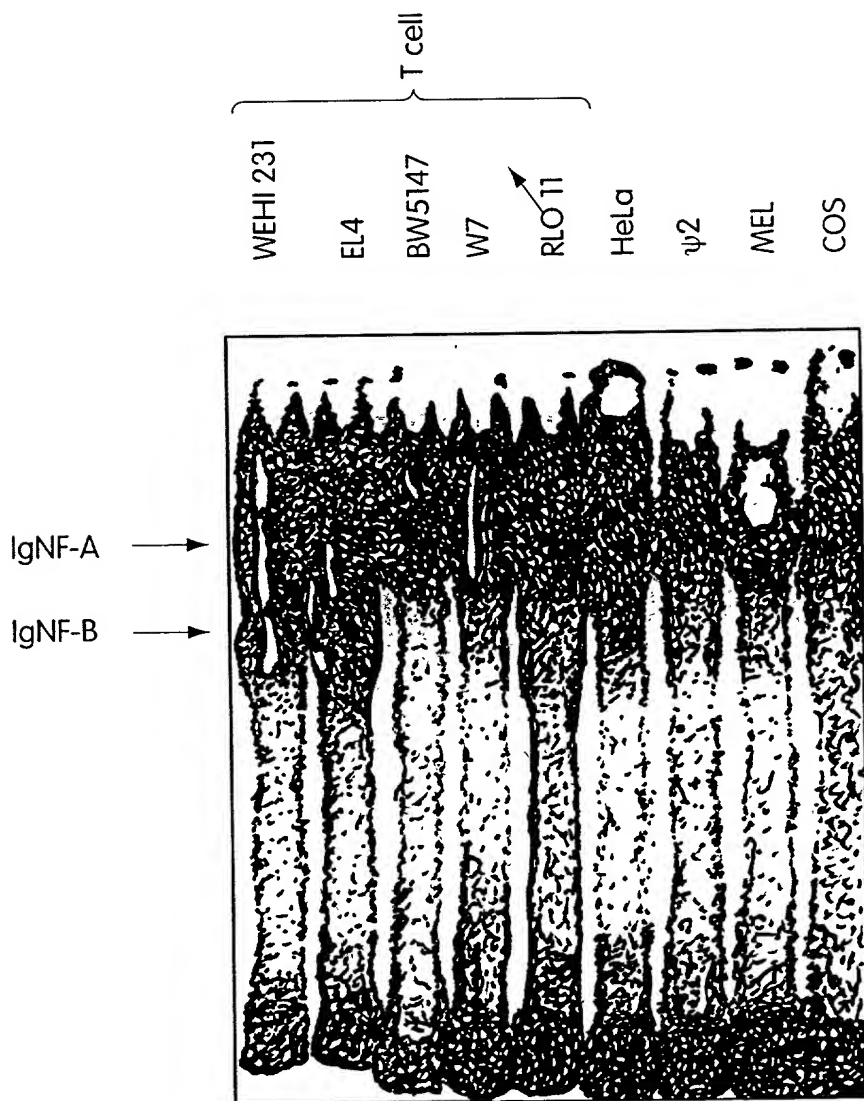
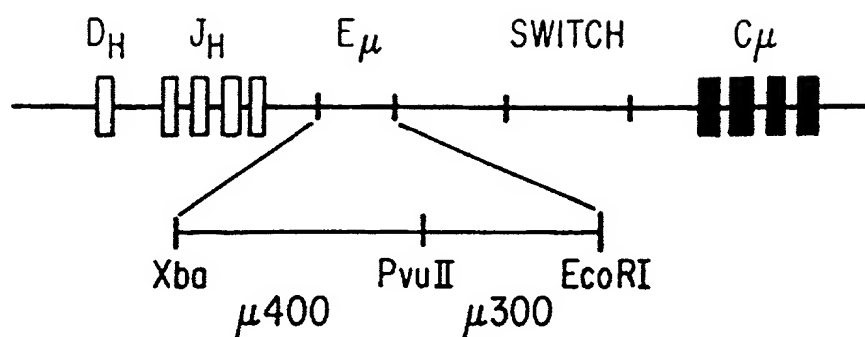


Fig. 8

Figure 9A



Fragment: $\mu 300$
 Extract: EW
 Competitor

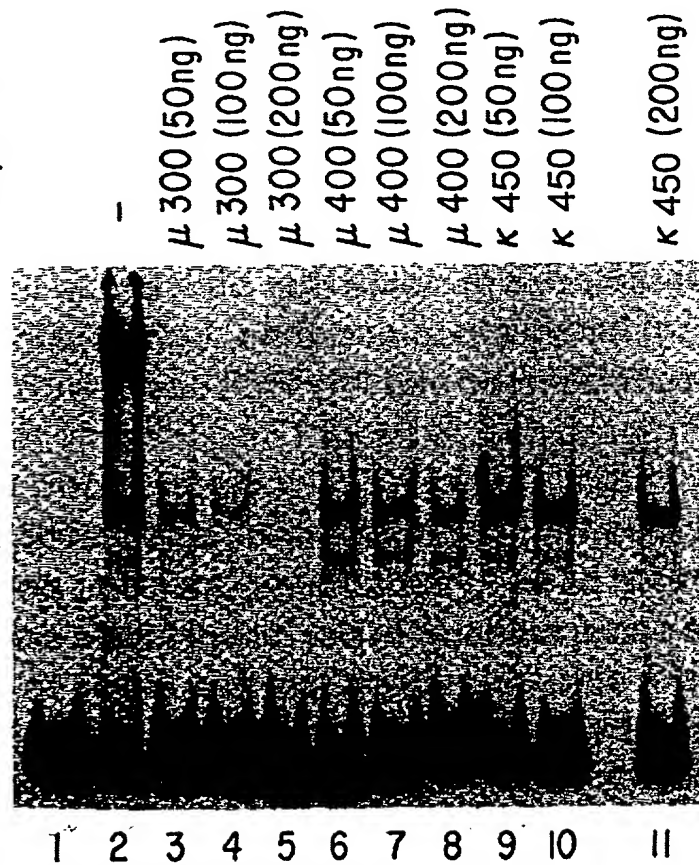


Figure 9B

Figure 10A

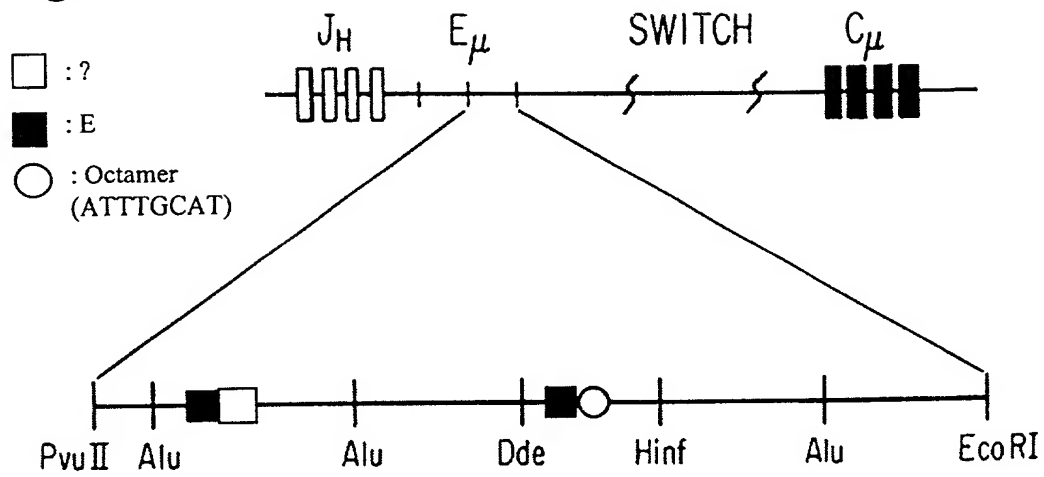
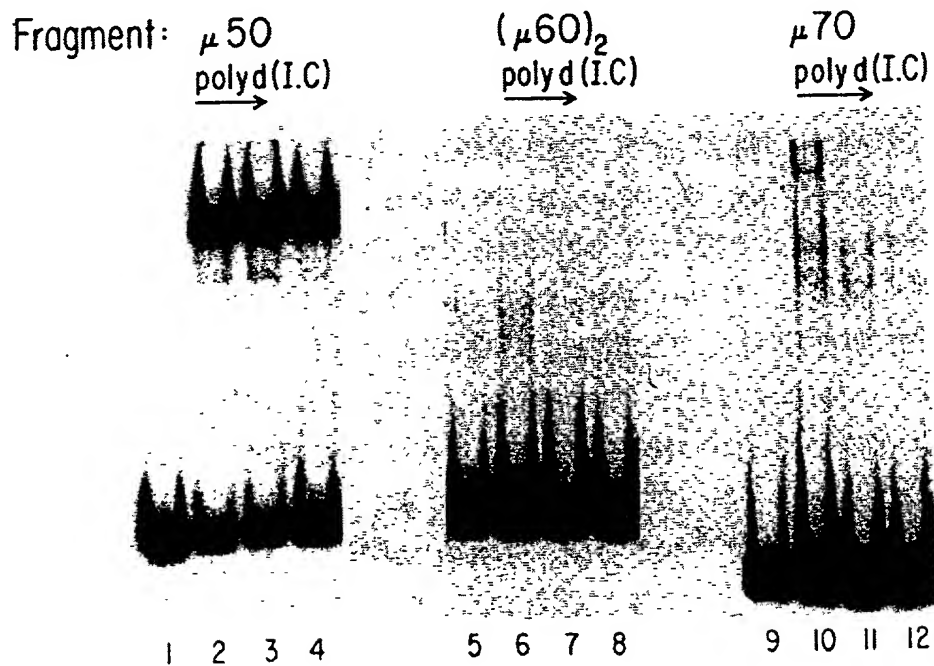


Figure 10B



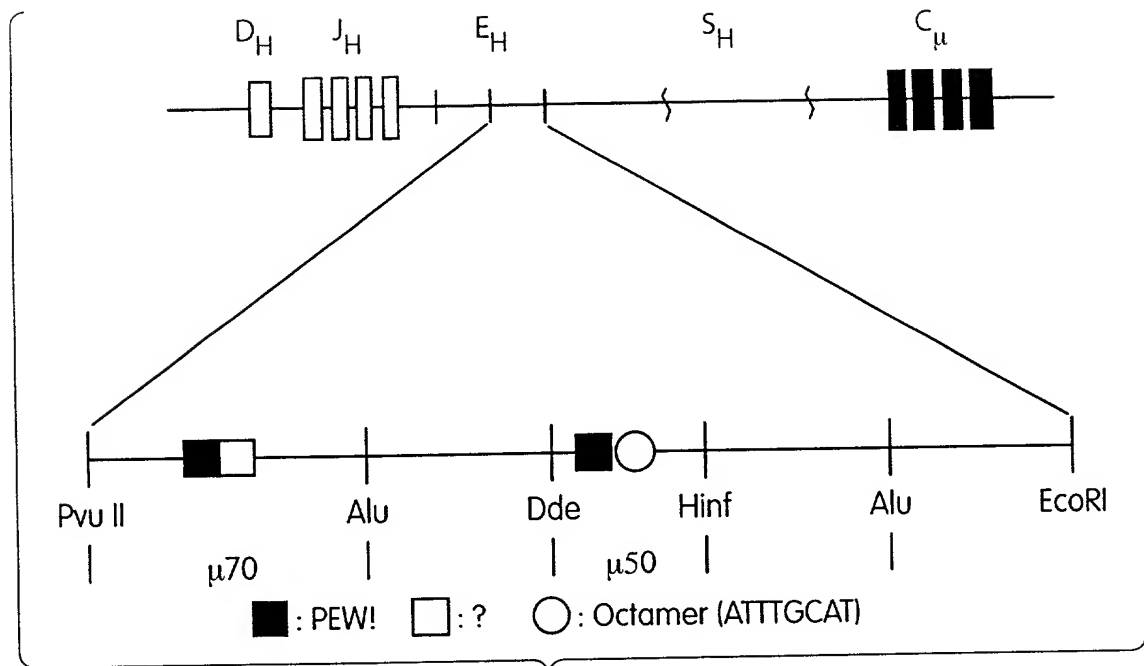


Fig. 10C

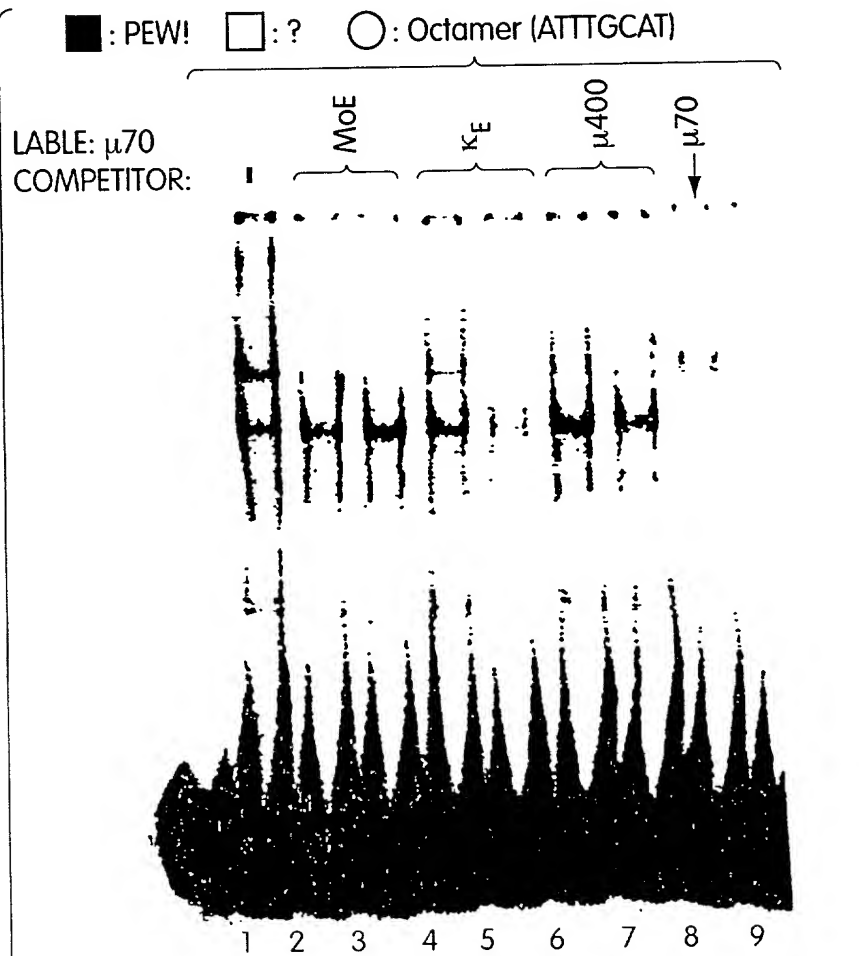


Fig. 10D

Figure 10E

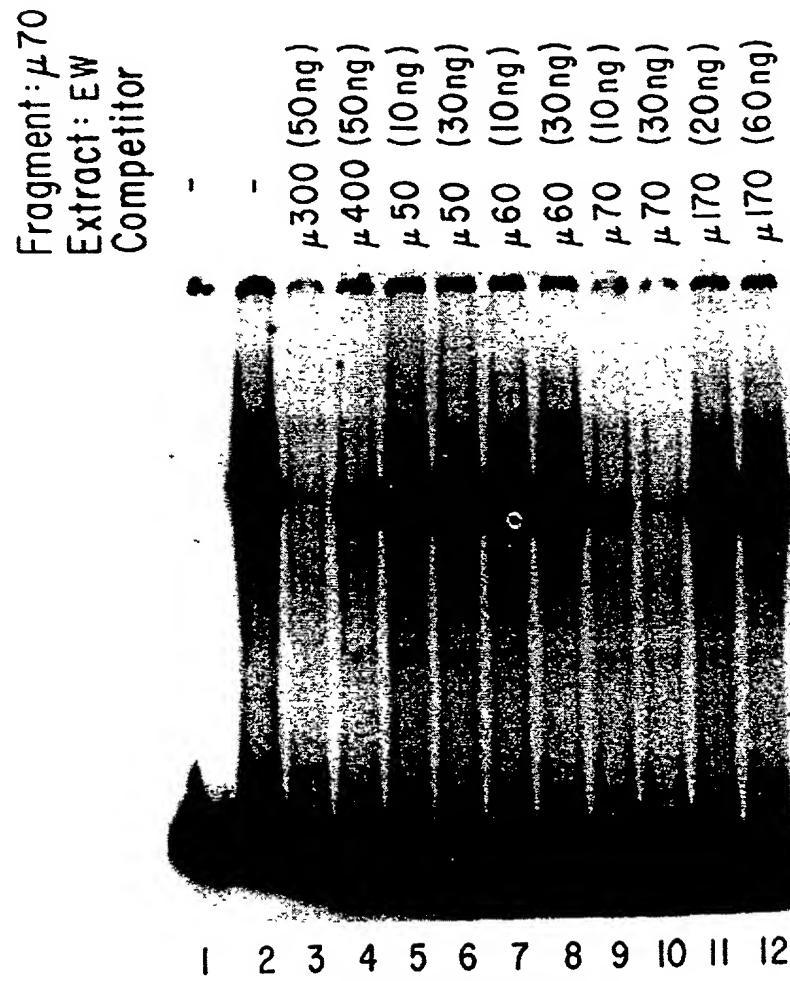


Figure 11A



Figure 11B



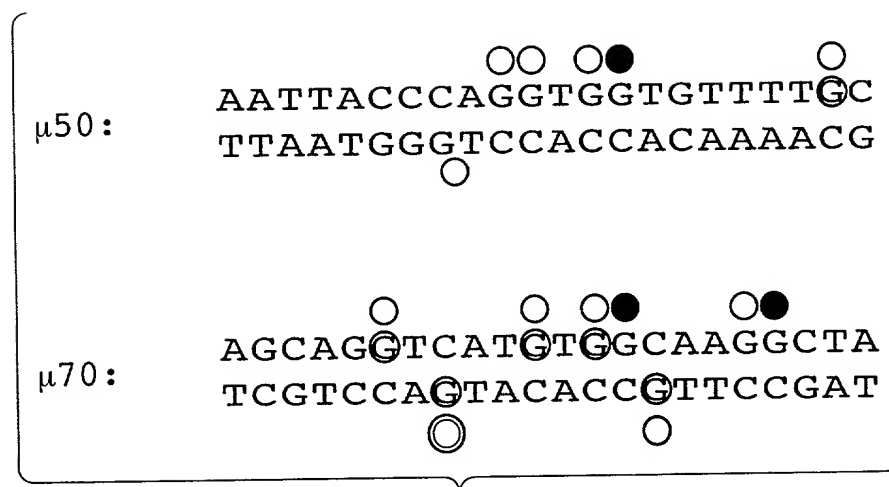


Fig. 11C

Figure 12A

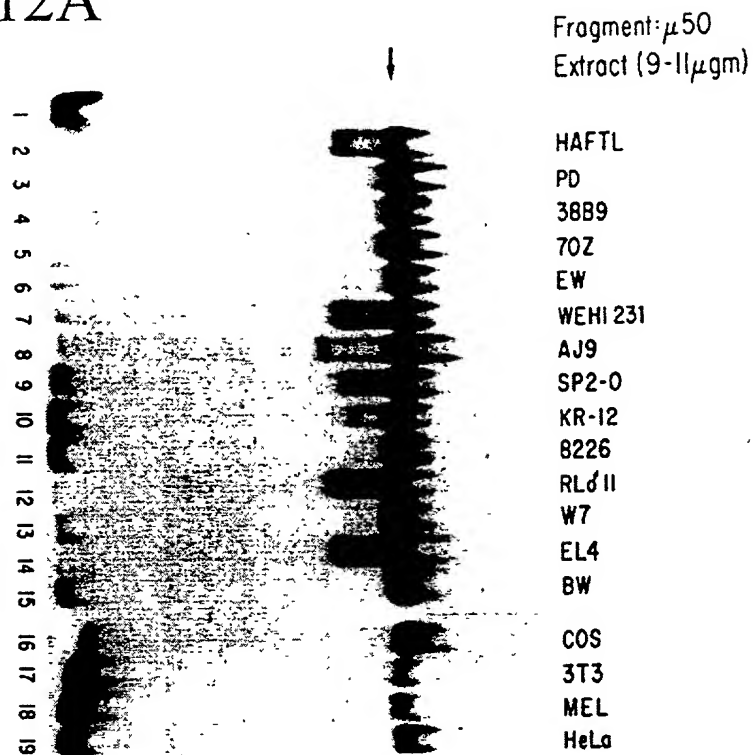
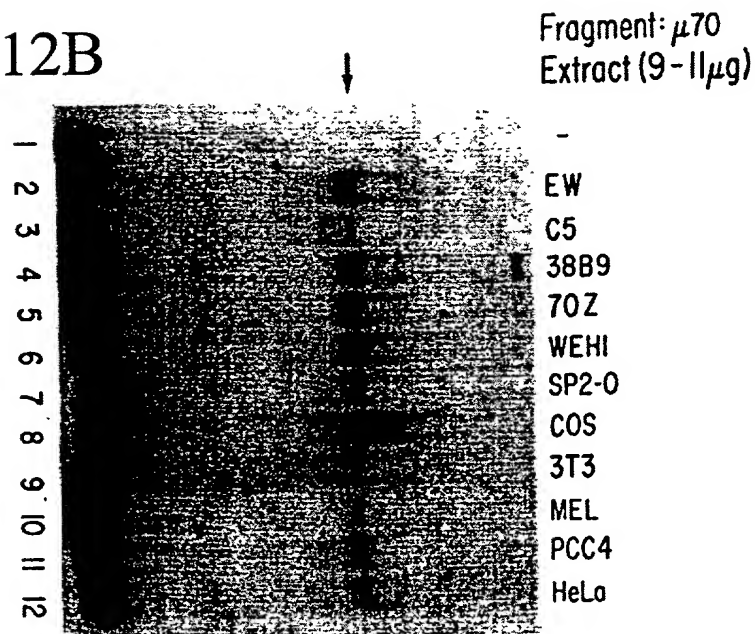


Figure 12B



10037341.010402

Figure 13A

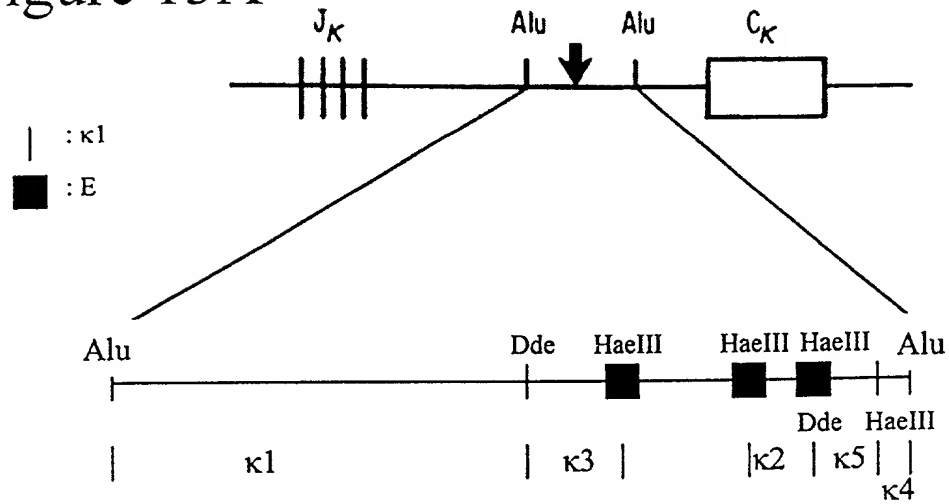


Figure 13B



Figure 13C

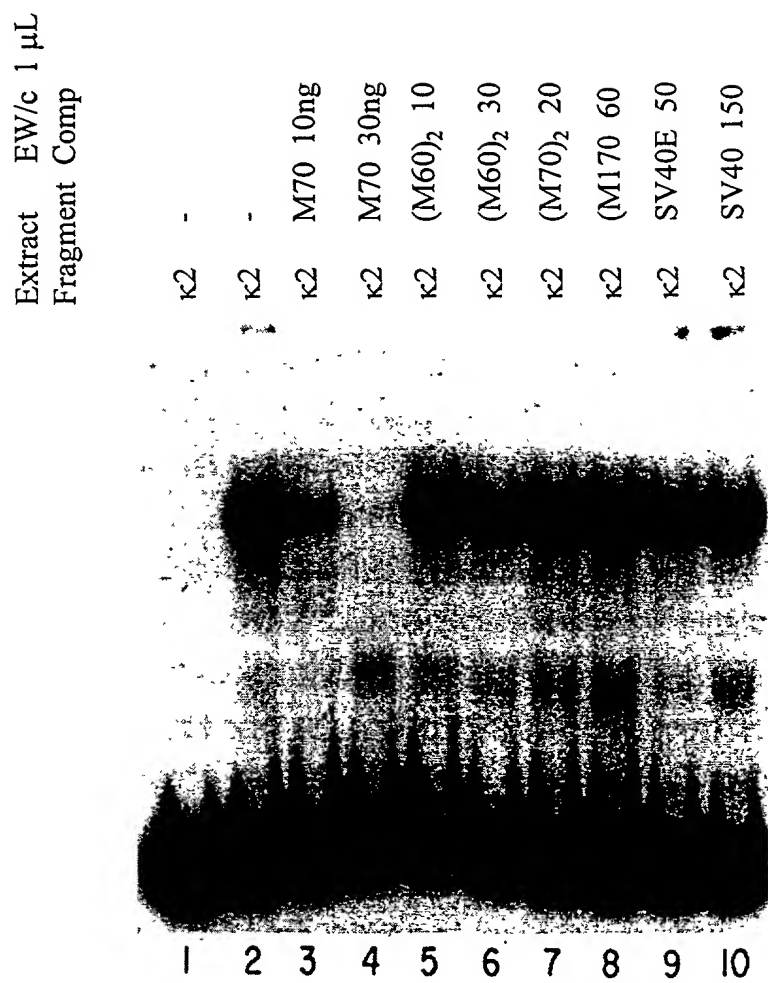
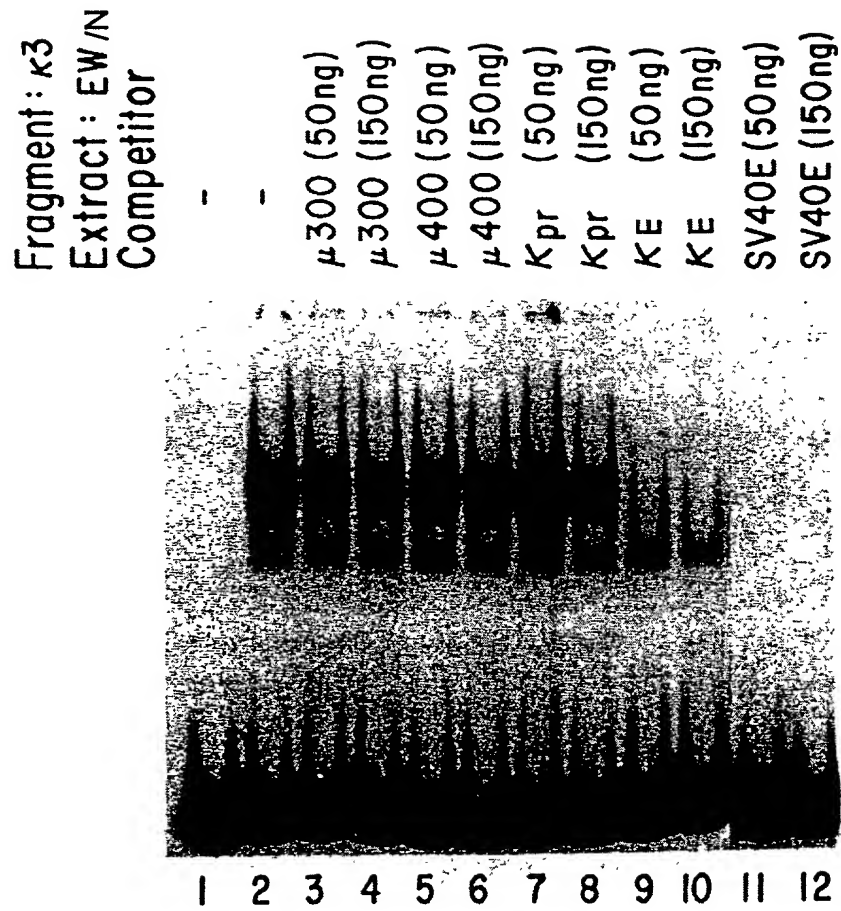


Figure 13D



Fragment: κ -3 / Dde*

Extract

MPCII

-

WEHI 231

-



Figure 14

Figure 15A

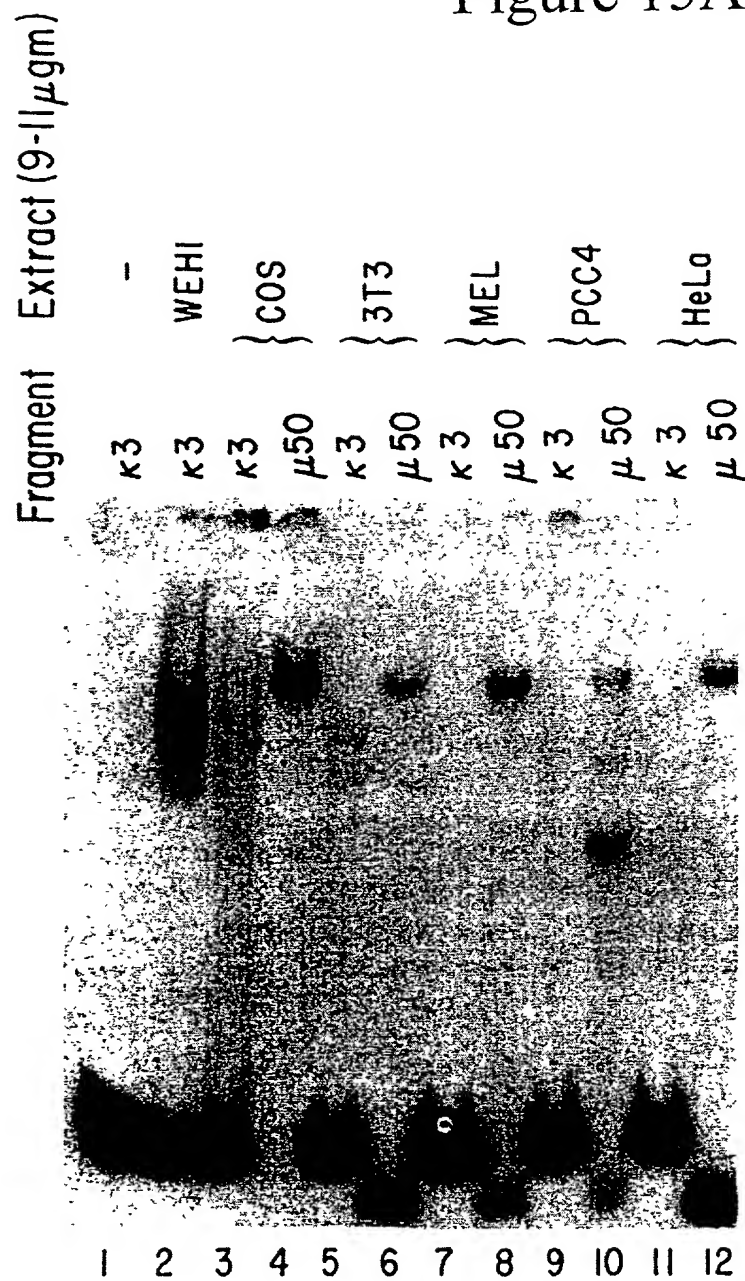
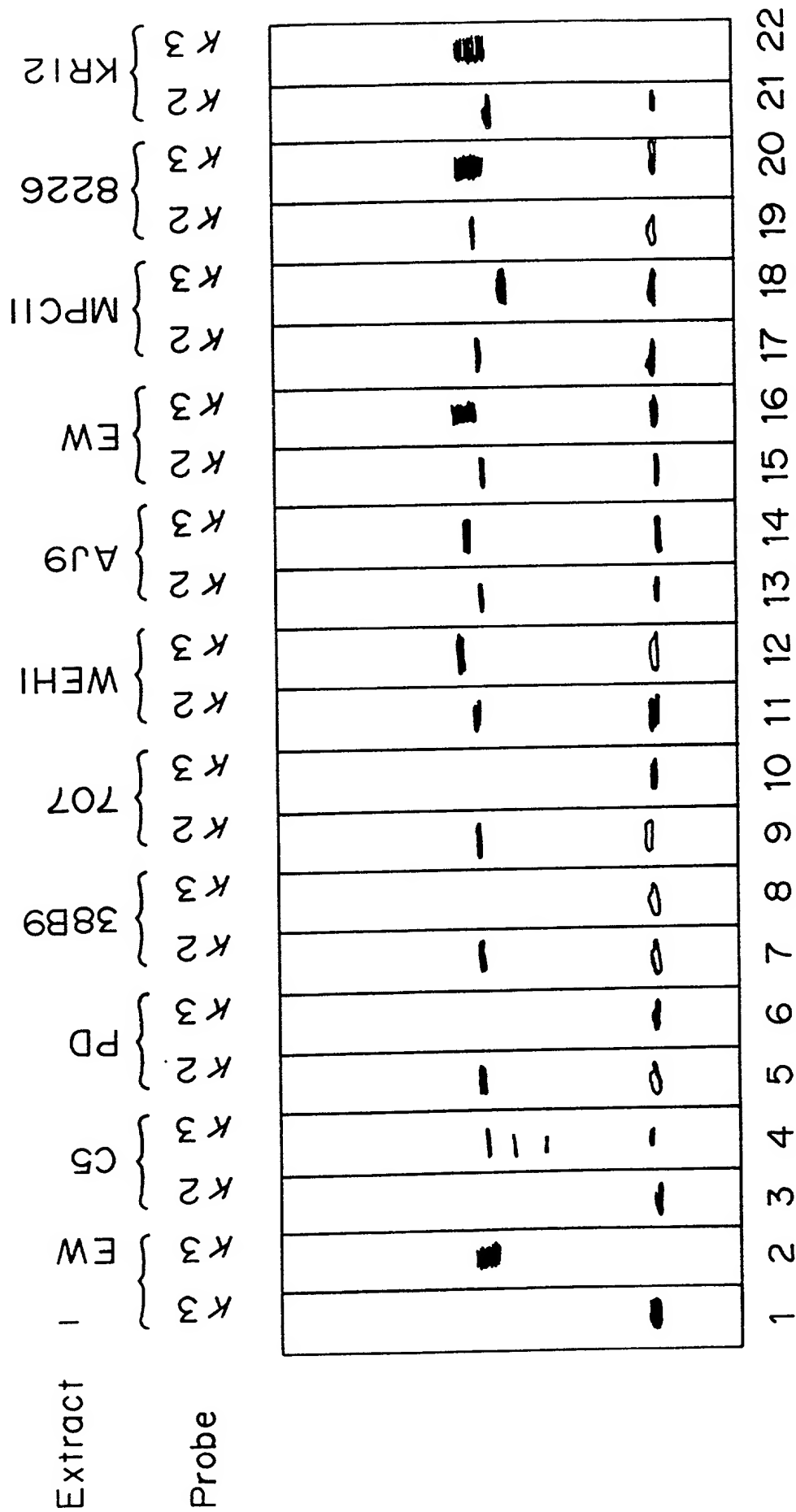


FIGURE 15b



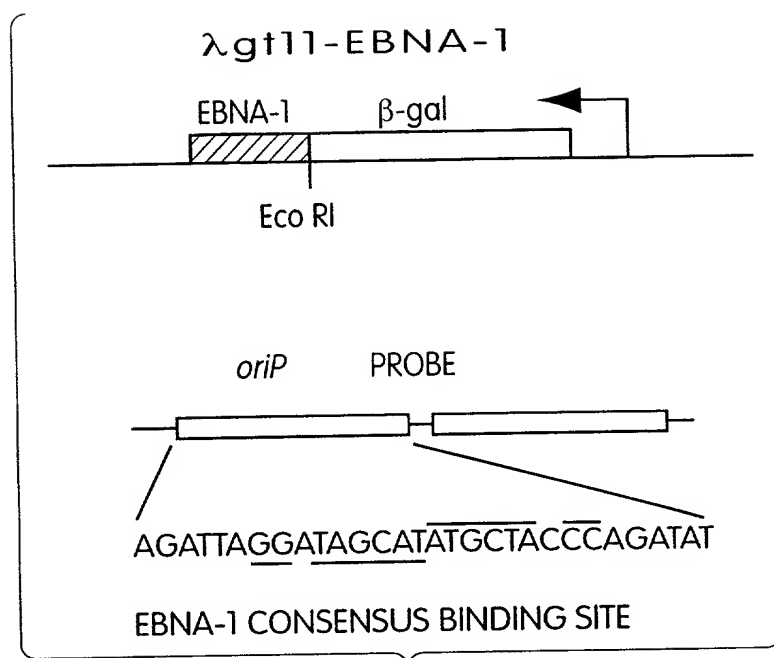


Fig. 16

MHC	<u>TGGGGATTCCCCA</u>
<i>mhc1</i>	TGcGGATTCCCcA
κ EN	aGGGGACTttCCg
κ en	aaattAcTttCCg a
SVEN	TGGGGAcTttCCA
HIV	TGGGGAcTttCCA aaGGGAcTttCCg

Fig. 17

CTGGGGCCCCCAGAGAGGGTGGGGAGATGACACAGTTGTTCCCCCAGCCCTGGCGGGGCG
 1 -----+-----+-----+-----+-----+-----+-----+

GGCAGCATGGTTCACTCCAGCATGGGGGCTCCAGAAATAAGAATGTCTAAGCCCCCTGGAG
 61 -----+-----+-----+-----+-----+-----+-----+
 M V H S S M G A P E I R M S K P L E

GCCGAGAAGCAAGGTCTGGACTCCCCATCAGAGCACACAGACACCGAAAGAAATGGACCA
 121 -----+-----+-----+-----+-----+-----+-----+
 A E K Q G L D S P S E M T D T E R N G P

GACACTAATCATCAGAACCCCCAAAATAAGACCTCCCCATTCTCCGTGTCCCCAACTGGC
 181 -----+-----+-----+-----+-----+-----+-----+
 D T N H O N P Q N R T S P F S V S P T G

CCCAGTACAAAGATCAAGGCTGAAGACCCCAGTGGCGATTTCAGCCCCAGCAGCACCCCTG
 241 -----+-----+-----+-----+-----+-----+-----+
 P S T K I K A E D P S G D S A P A A P L

CCCCCTCAGCCGGCCAGCCTCATCTGCCCCAGGCCCAACTCATGTTGACGGGCAGCCAG
 301 -----+-----+-----+-----+-----+-----+-----+
 P P Q P A Q P N L P Q A Q L M L T G S Q

CTAGCTGGGGACATACAGCAGCTCCTCCAGCTCCAGCAGCTGGTGCTTGTCAGGCCAC
 361 -----+-----+-----+-----+-----+-----+-----+
 L A G D I Q Q L L Q L Q Q L V L V P G H

CACCTCCAGCCACCTGCTCAGTTCCTGCTACCGCAGGCCAGCAGAGCCAGCCAGGCCTG
 421 -----+-----+-----+-----+-----+-----+-----+
 H L Q P P A Q F L L P Q A Q Q S Q P G L

CTACCGACACCAAATCTATTCCAGCTACCTCAGCAAACCCAGGGAGCTCTTCTGACCTCC
 481 -----+-----+-----+-----+-----+-----+-----+
 L P T P H L F Q L P Q Q T Q G A L L T S

CAGCCCCGGGCGGGCTTCCCACACAGGCCGTGACCCGCCCTACGCTGCCCGACCCGCAC
 541 -----+-----+-----+-----+-----+-----+-----+
 Q P R A G L P T Q A V T R P T L P D P H

CTCTCGCACCCGCAGCCCCCAAATGCTTGGAGCCACCATCCCACCCCGAGGAGCCCAGT
 601 -----+-----+-----+-----+-----+-----+-----+
 L S H P Q P P K C L E P P S H P E E P S

GATCTGGAGGAGCTGGAGCAATTGGCCCGCACCTTCAAGCAACGCCGCATCAAGCTGGGC
 661 -----+-----+-----+-----+-----+-----+-----+
 D L E E L E Q F A R T F K Q R R I K L G

TTCACGCAGGGTGATGTGGGCCTGGCCATGGGCAAGCTCTACGCCAACGACTTCAGCCAG
 721 -----+-----+-----+-----+-----+-----+-----+
 F T Q G D V G L A M G K L Y G N D F S Q
 C G P G H G Q A L R Q R L Q P D

Fig. 18A

Fig. 18A
(CONTINUED)

Fig. 18A
(CONTINUED)

GTTACTACCTTATCCTCAGCTGTGGGGACGCTCCACCCCAGCCGGACAGCTGGAGGGGGT
 1261 -----+-----+-----+-----+-----+-----+-----+
 V T T [L] S S A V G T [L] H P S R T A G G G
 Y Y L I L S C G D A P P Q P D S N M G W
 GGGGGCGGGGGCGGGGCTGCGCCCCCCTCAATTCCATCCCCTCTGTCACTCCCCACCC
 1321 -----+-----+-----+-----+-----+-----+-----+
 G G G G G A A P P L N S I P S V T P P P
 G M G R G C A P P Q F H P L C H S P T P
 CCGGCCACCACCAACAGCACAAACCCAGCCCTCAAGGCAGCCACTCGGCTATCGGCTTG
 1381 -----+-----+-----+-----+-----+-----+-----+
 P A T T N S T N P S P Q G S H S A I G L
 G H N Q Q H K P Q P S R Q P L G Y M L V
 TCAGGCCTGAACCCCAGCACGGGGTAAGTGGGTGCACGTGGGAAGCTGTGGGGAGAAGCA
 1441 -----+-----+-----+-----+-----+-----+-----+
 S G L H P S T G +
 A P E P Q N G V S G C T W E A V G R S R
 GCGTCGCTGCTCTTCTAGGGTGGGGAGCGGCACCCCAGTTATGTTGGCAGGTCCCTGCC
 1501 -----+-----+-----+-----+-----+-----+-----+
 V A A A S R V G S G T P V M L A G P C P
 CCTGCTAATGCCTCTGCTTTGCCTCTTGCAAGCACAATGGTGGGGTTGAGCTCCGGCT
 1561 -----+-----+-----+-----+-----+-----+-----+
 C +
 GAGTCCAGCCCTCATGAGCAACAACCCTTTGGCCACTATCCAAGGTGCGTGCTGCCTCAT
 1621 -----+-----+-----+-----+-----+-----+-----+
 GTCACACCCATCGTCACCAGCCCCGGAATTCGAG
 1681 -----+-----+-----+-----+-----+-----+-----+

Fig. 18A
(CONTINUED)

↓

```

1411 CCTCAAGGCAGCCACTCGGCTATCGGCTTGTCTAGGCCTGAACCCCAGCACGGGCCCTGGC
-----+-----+-----+-----+-----+-----+-----+
P Q G S H S A I G L S G L N P S T G P G
S A Q P L G Y R L V M P E P Q M G P N P

1471 CTCTGGTGGAACCCTGCCCCCTTACCAGCCTTGATGGCAGCGGGAATCTGGTGCTGGGGGC
-----+-----+-----+-----+-----+-----+-----+
L W W N P A P Y Q P .
L V E P C P L P A L M A A G I W C W G Q

1531 AGCCGGTGCAGCCCCGGGGAGCCCTGGCCTGGTGACCTCGCCGCTCTTCTTGAATCATGC
-----+-----+-----+-----+-----+-----+-----+
P V Q P R G A L A W .

1591 TGGGCTGCCCCCTGCTCAGCACCCCGCCTGGTGTGGGCCTGGTCTCAGCAGCGGCTGCGGG
-----+-----+-----+-----+-----+-----+-----+

1651 TGTGGCAGCCTCCATCTCCAGCAAGTCTCCTGGCCTCTCCTCCTCATCCTCTTCATCCTC
-----+-----+-----+-----+-----+-----+-----+

1711 ATCCTCCTCCTCCTCCACTTGCAGCGAGACGGCAGCACAGACCCTGGAGGTCCAGGGGGG
-----+-----+-----+-----+-----+-----+-----+

1771 CCCGAGGCAGGGTCCAAACCTGAGTGAGGGCCAGCCATGCCTCCCCCTCCCATTCCTCTGG
-----+-----+-----+-----+-----+-----+-----+

1831 TCCCTGCCCCGGAATTC
-----+-----

```

Fig. 18B

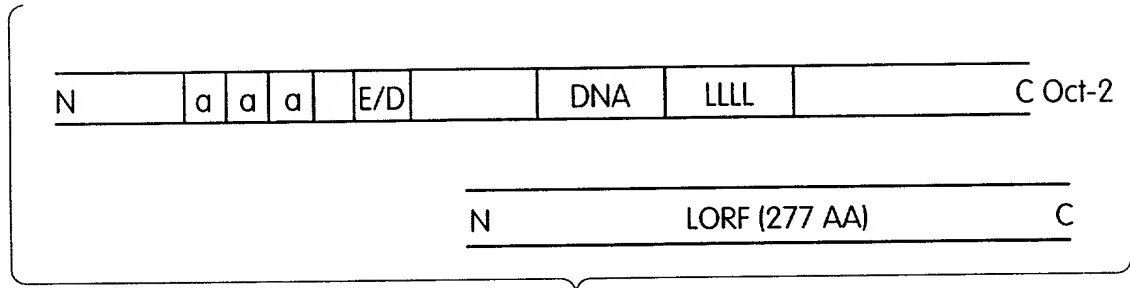


Fig. 18C

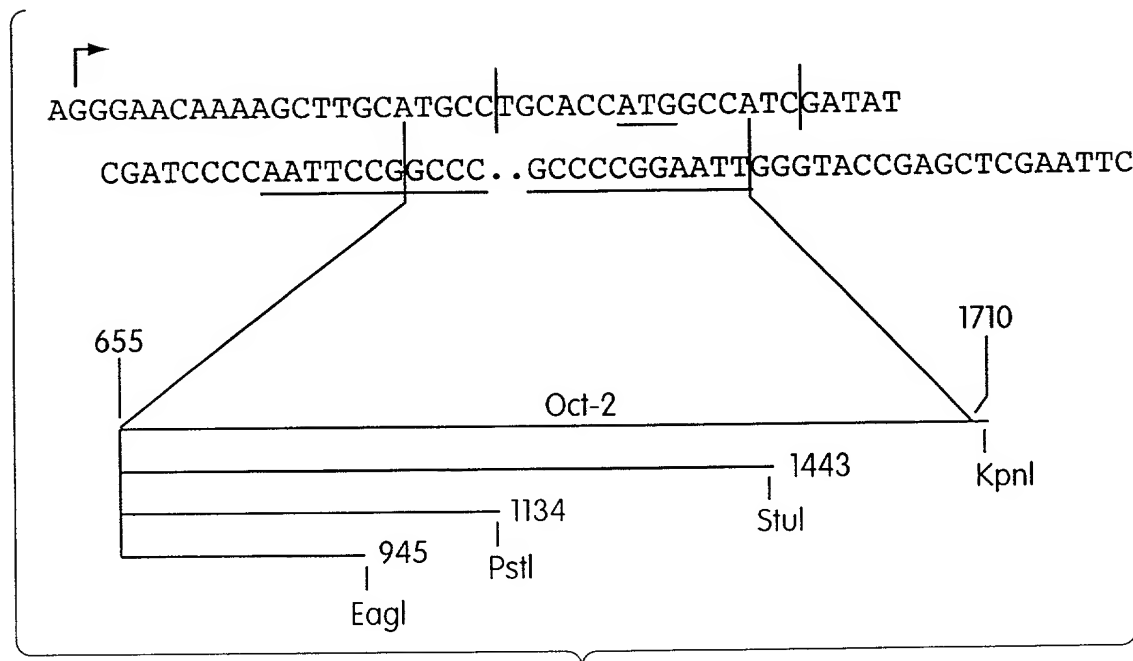


Fig. 19

Figure 21A

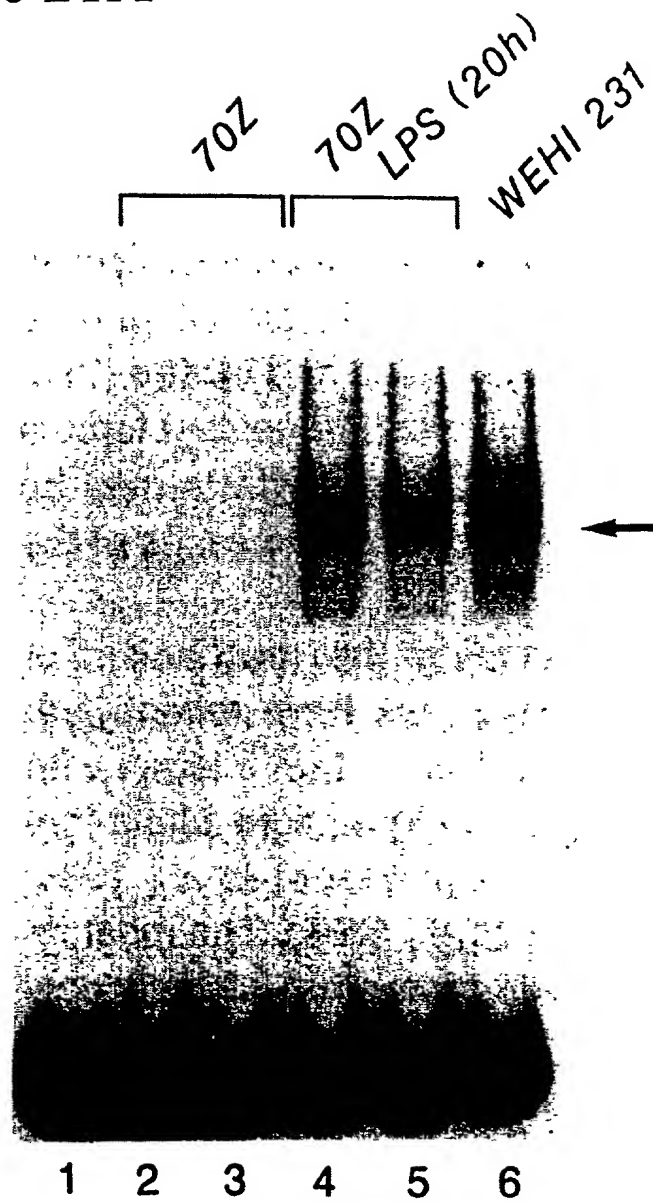


Figure 21B

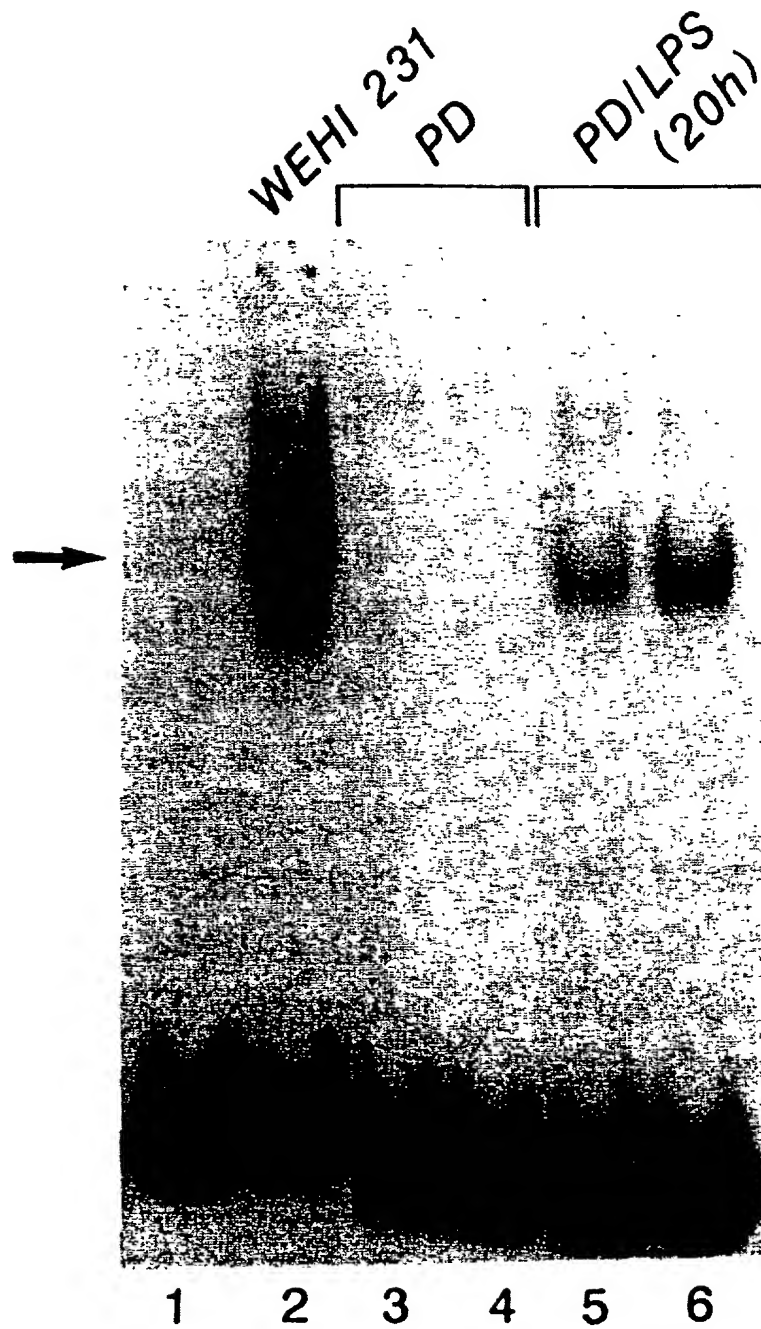


Figure 22A

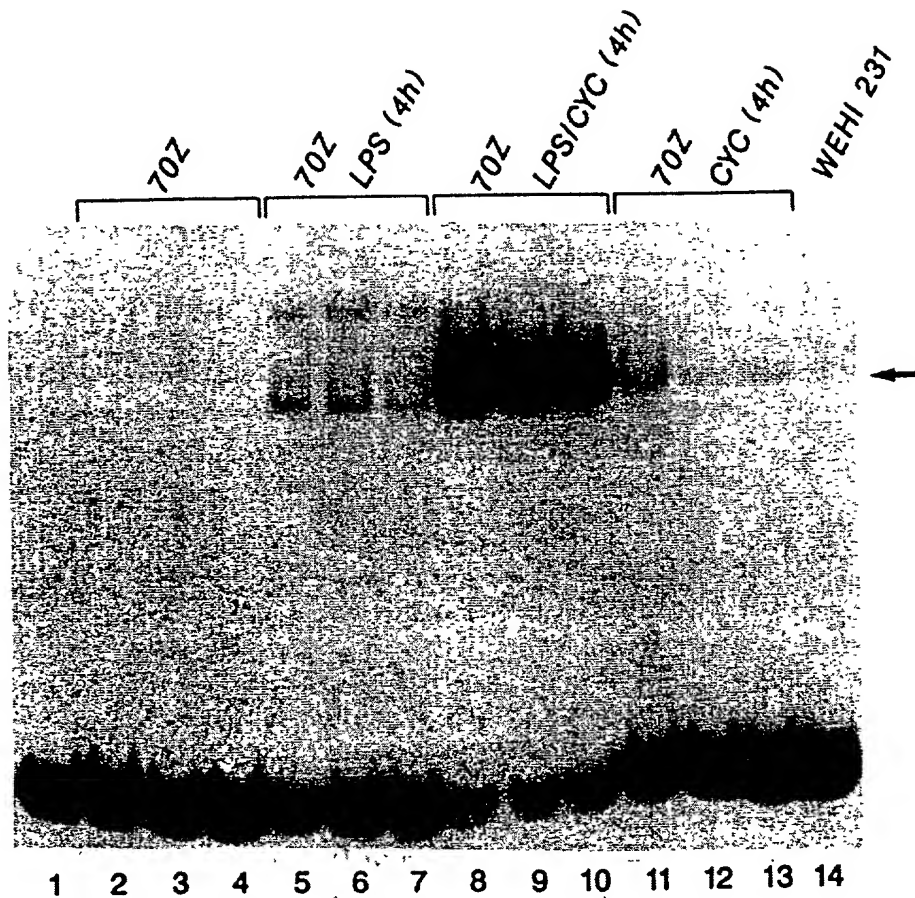


Figure 22B

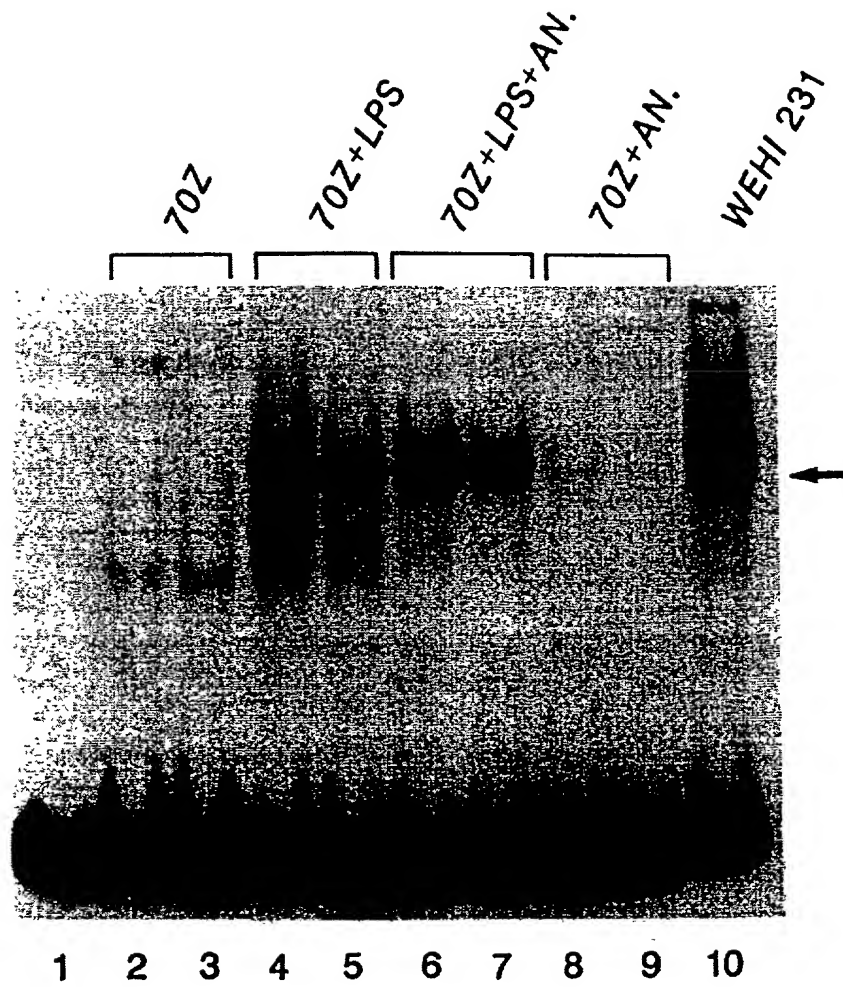


Figure 23A

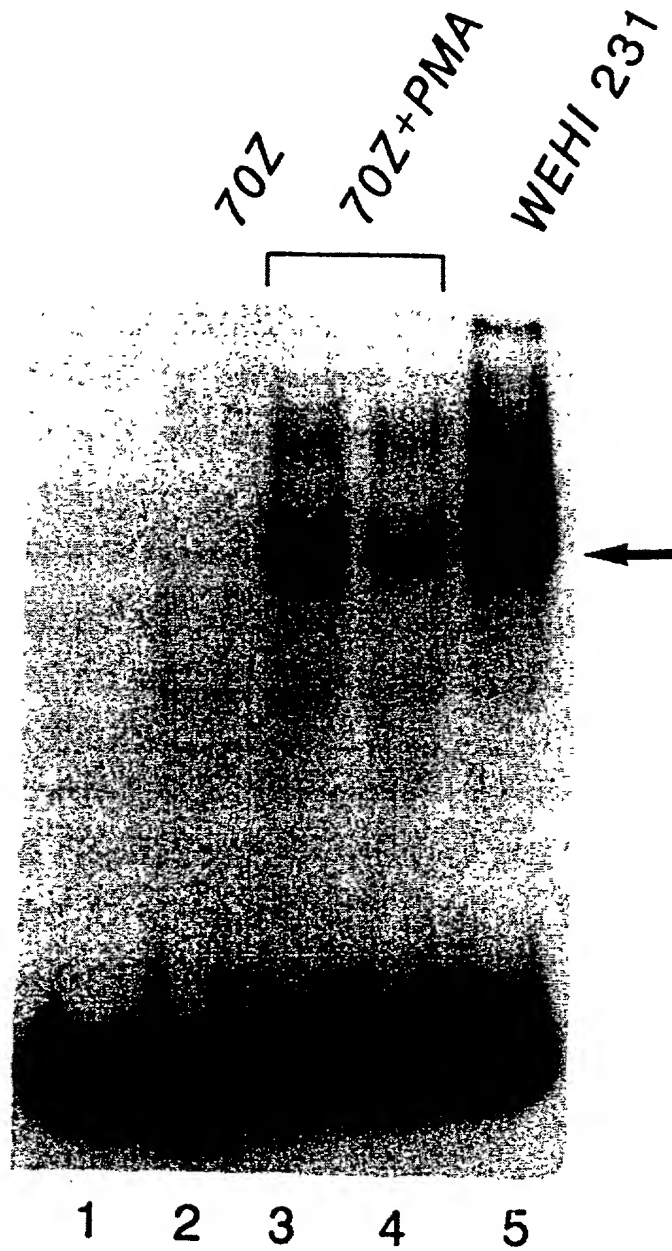


Figure 23B

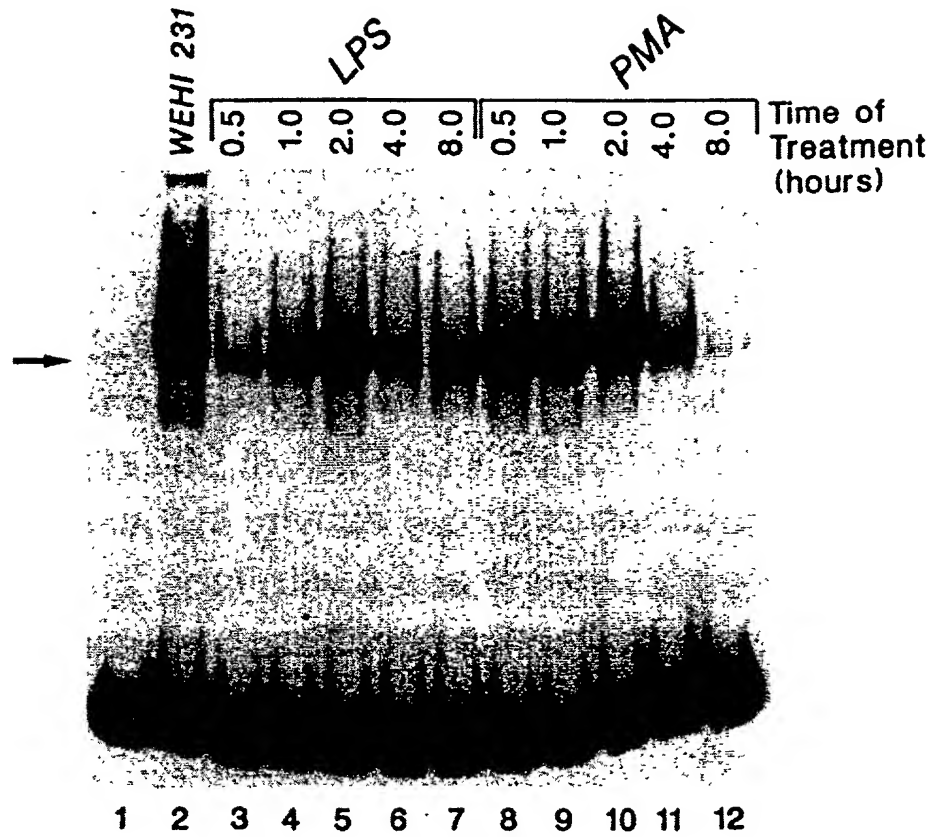


Figure 24A

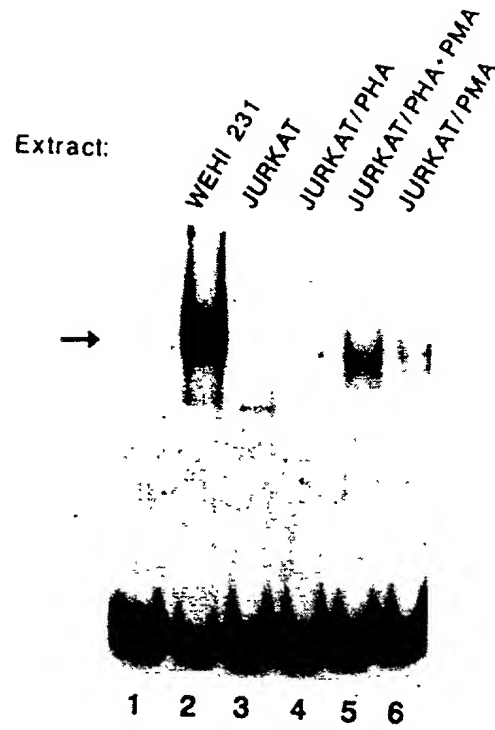


Figure 24B

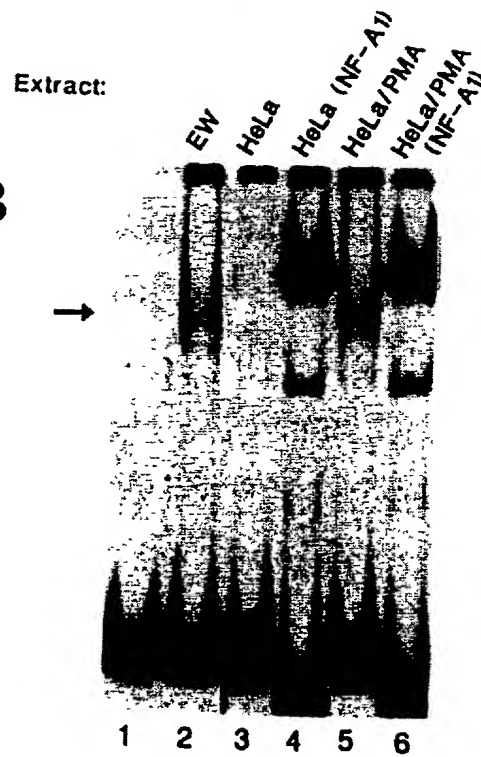
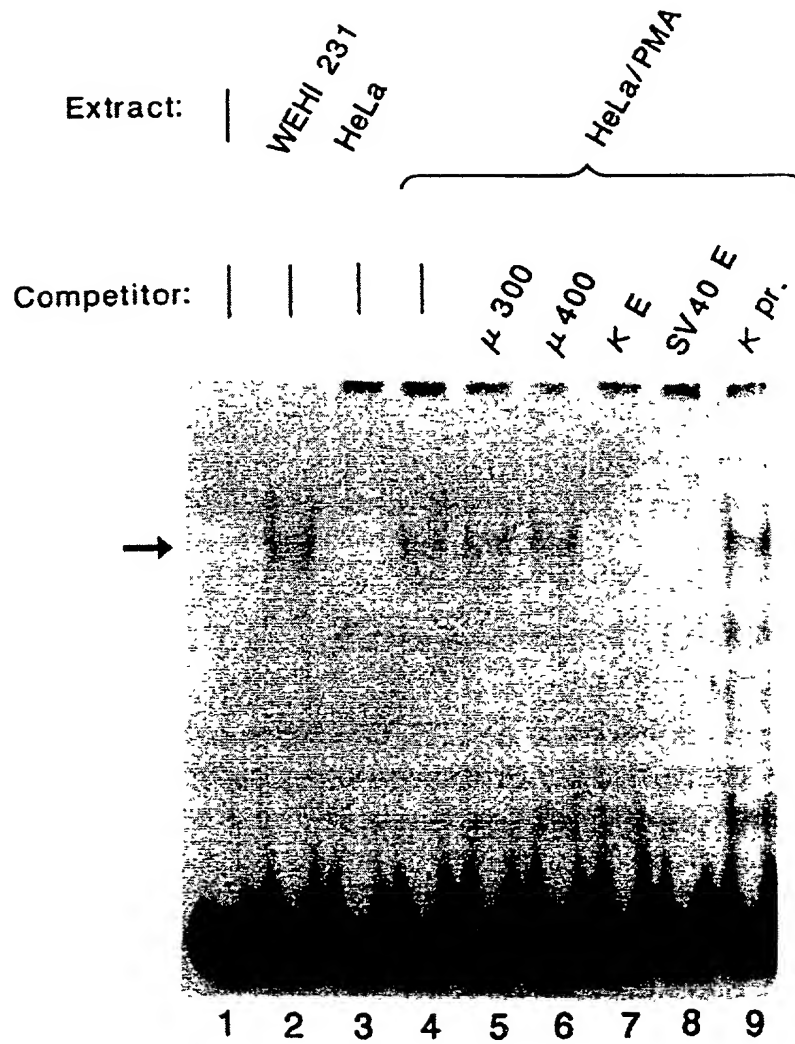


Figure 24C



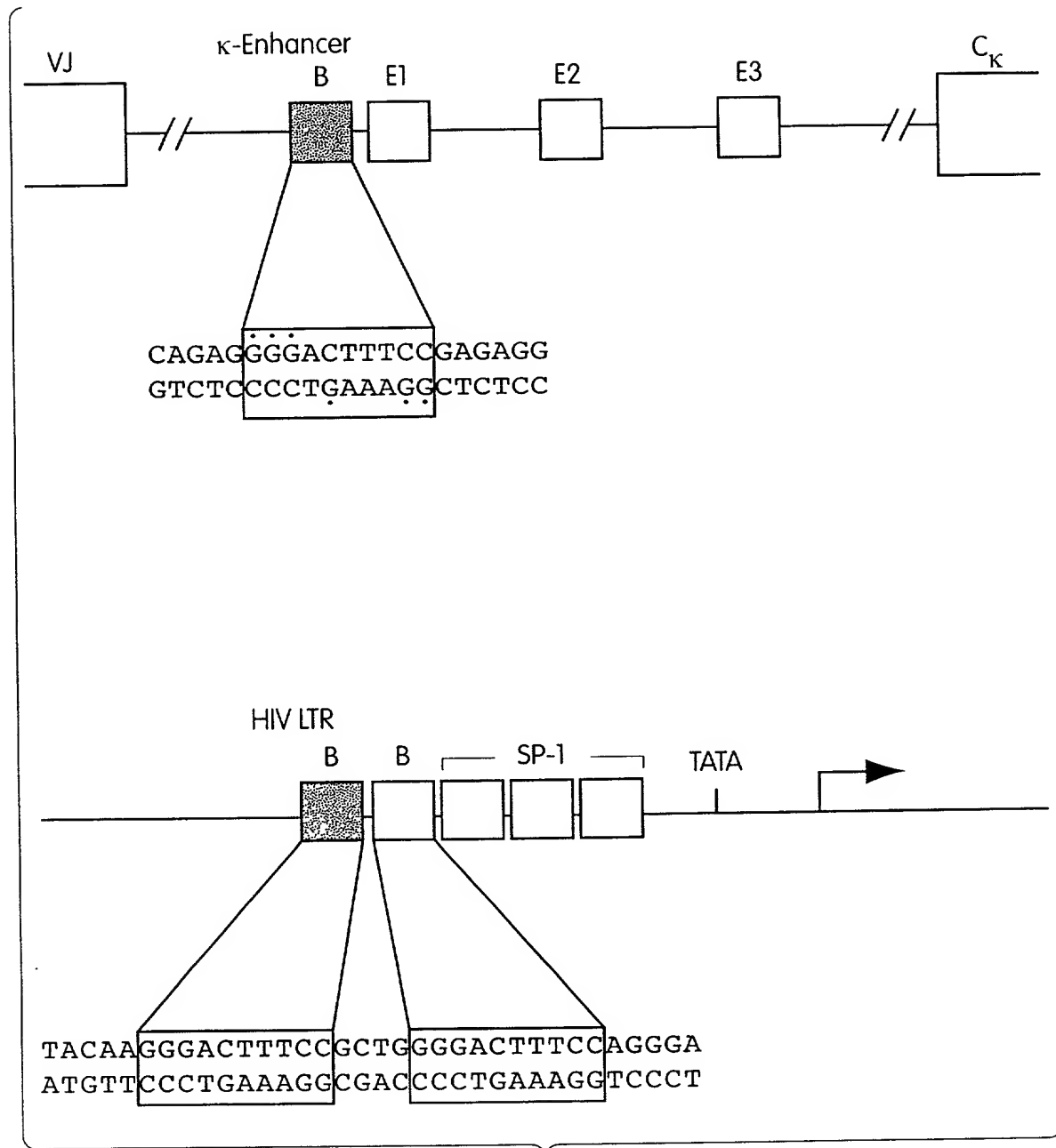


Fig. 25

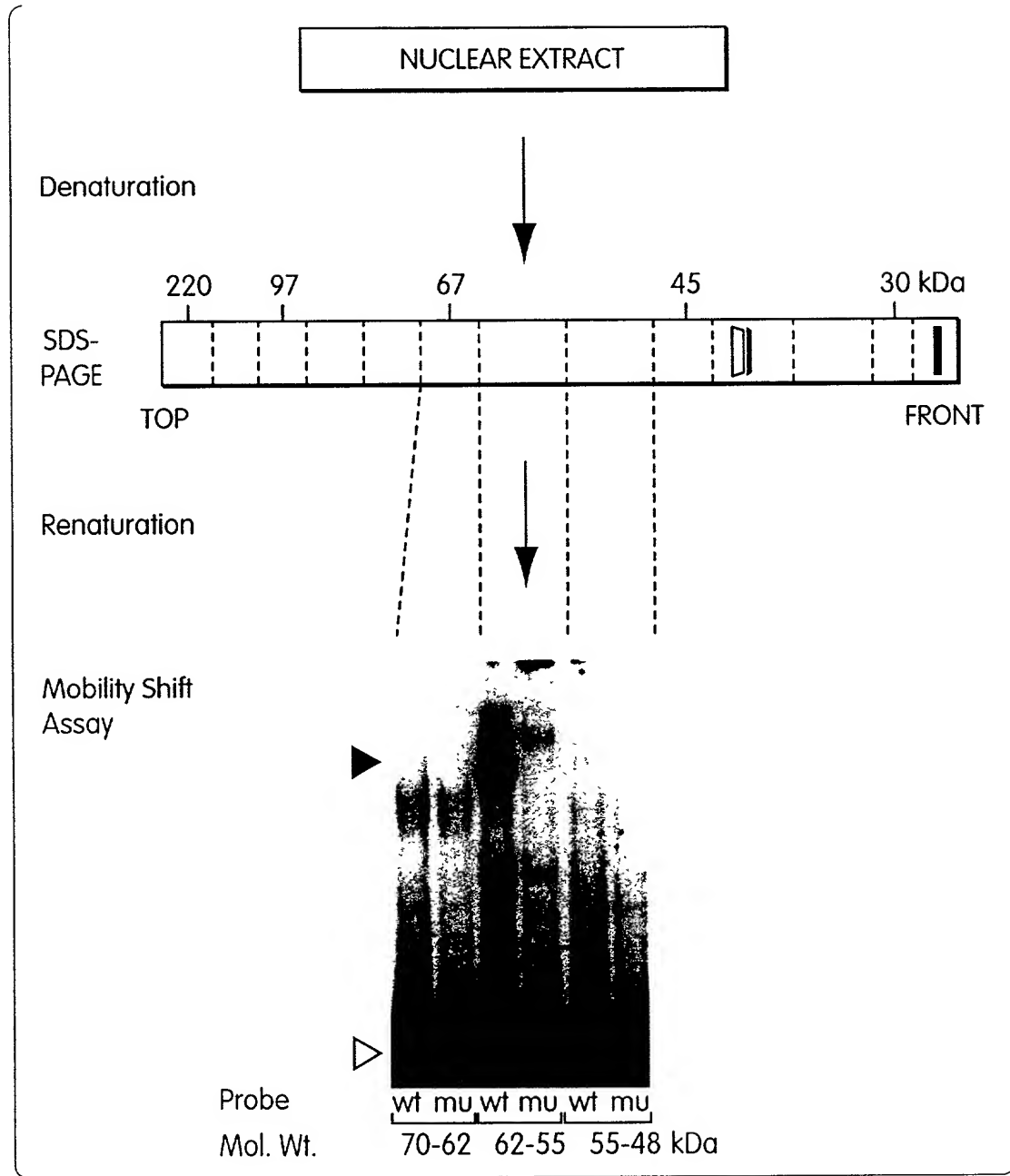


Fig. 26A

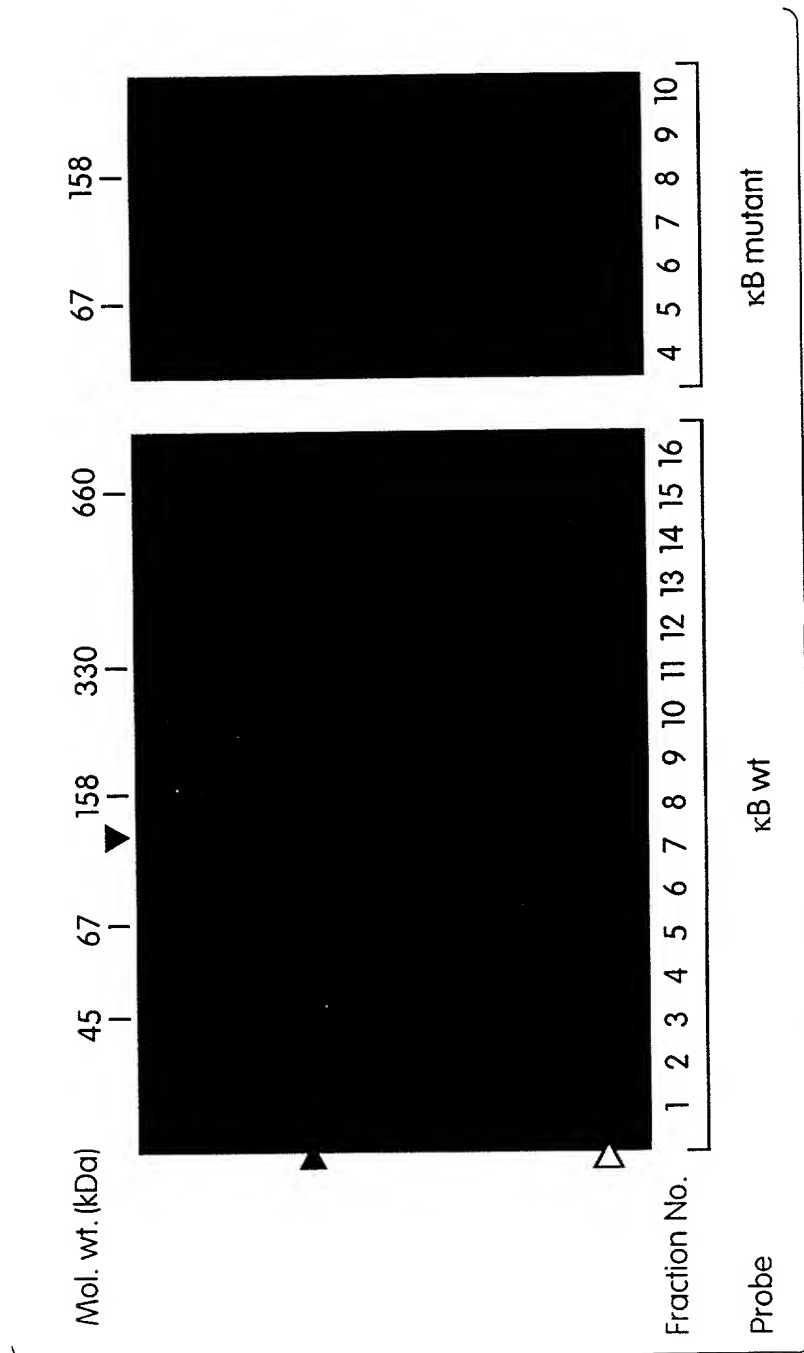


Fig. 26B

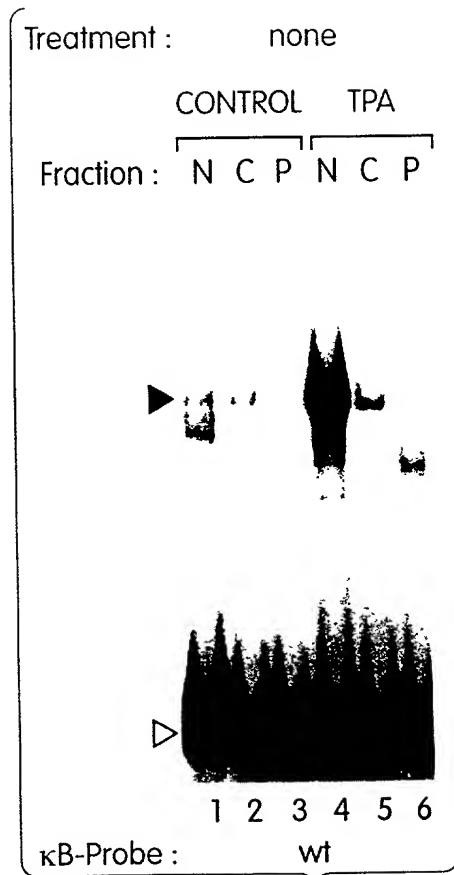


Fig. 27A

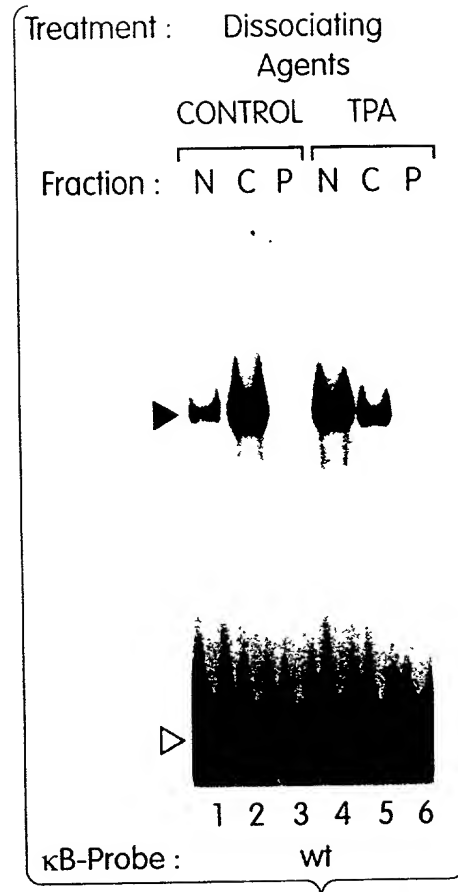


Fig. 27B

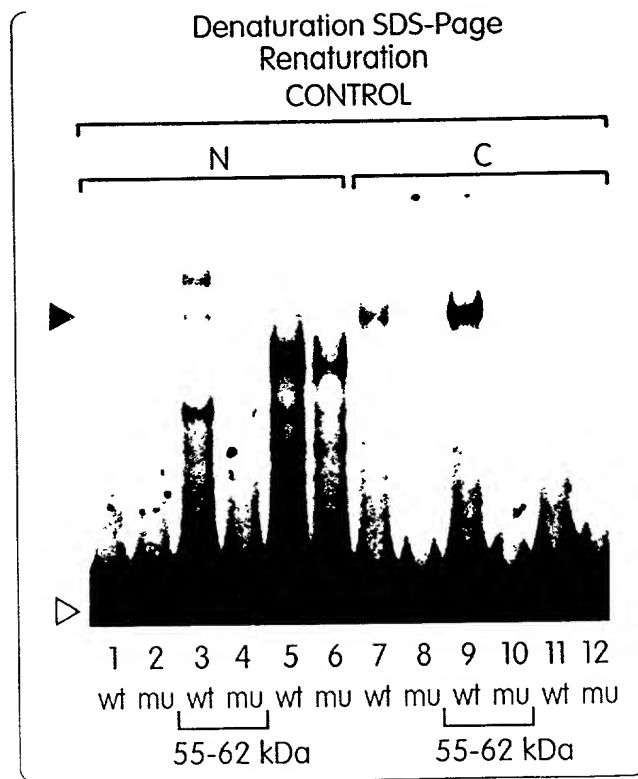


Fig. 27C

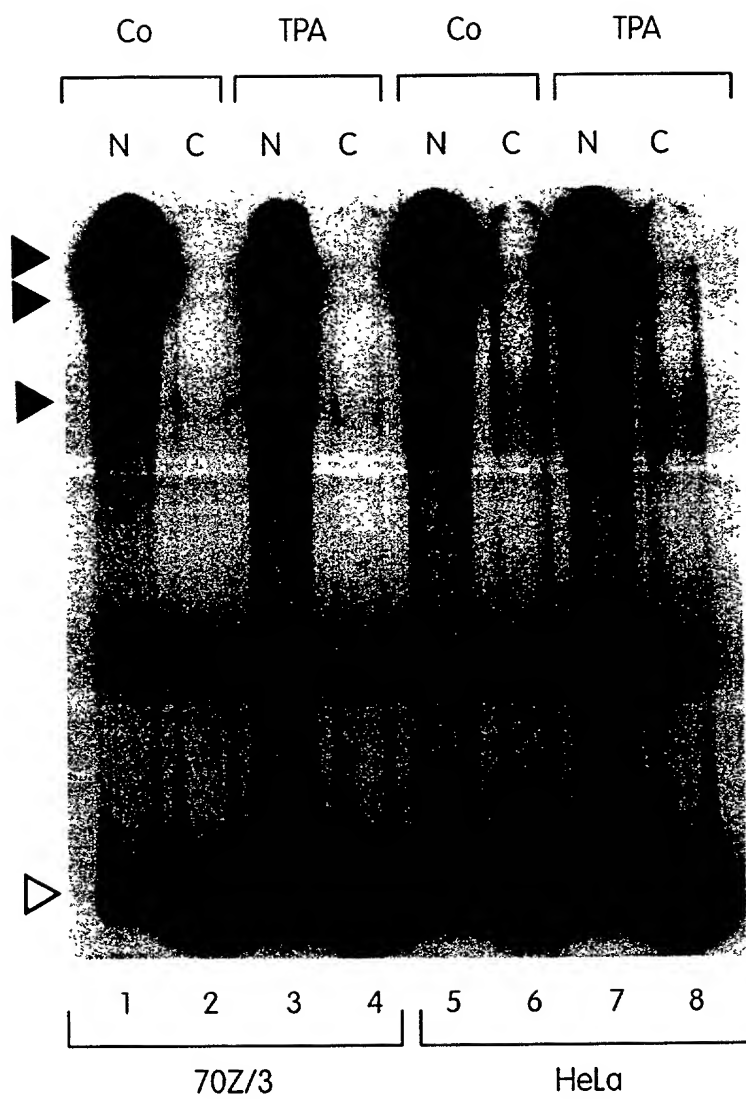


Fig. 28

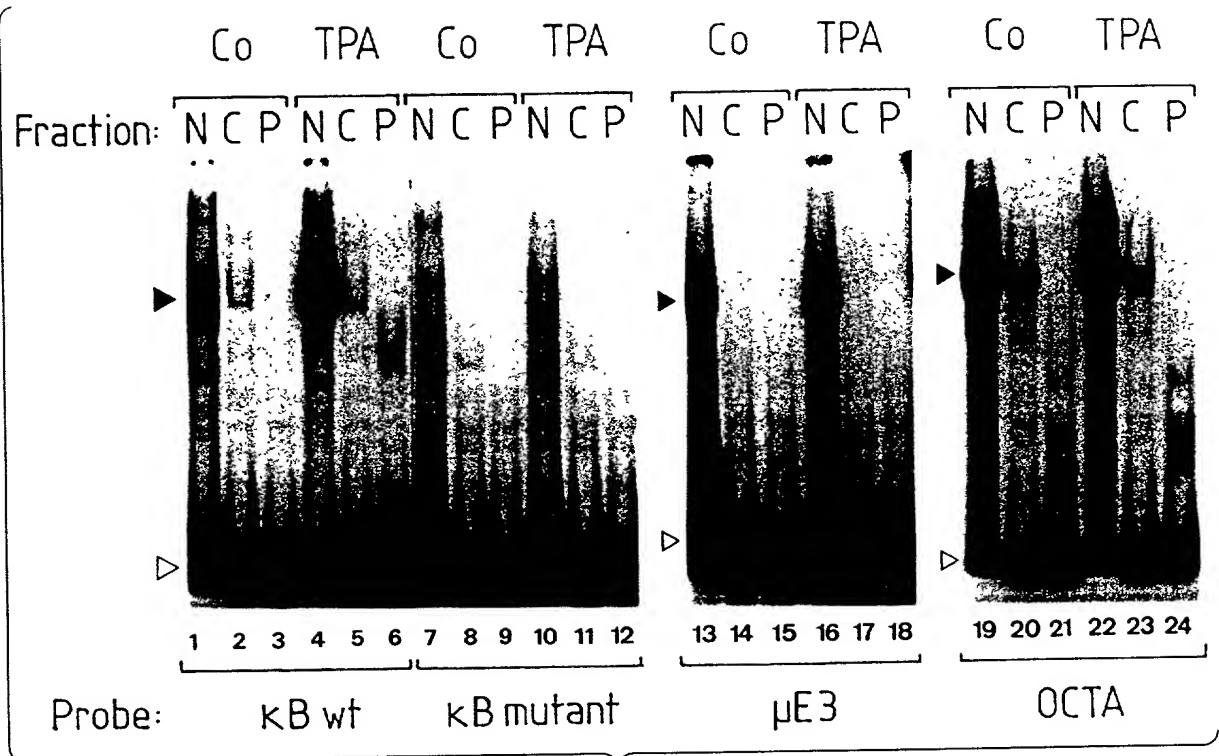


Fig. 29

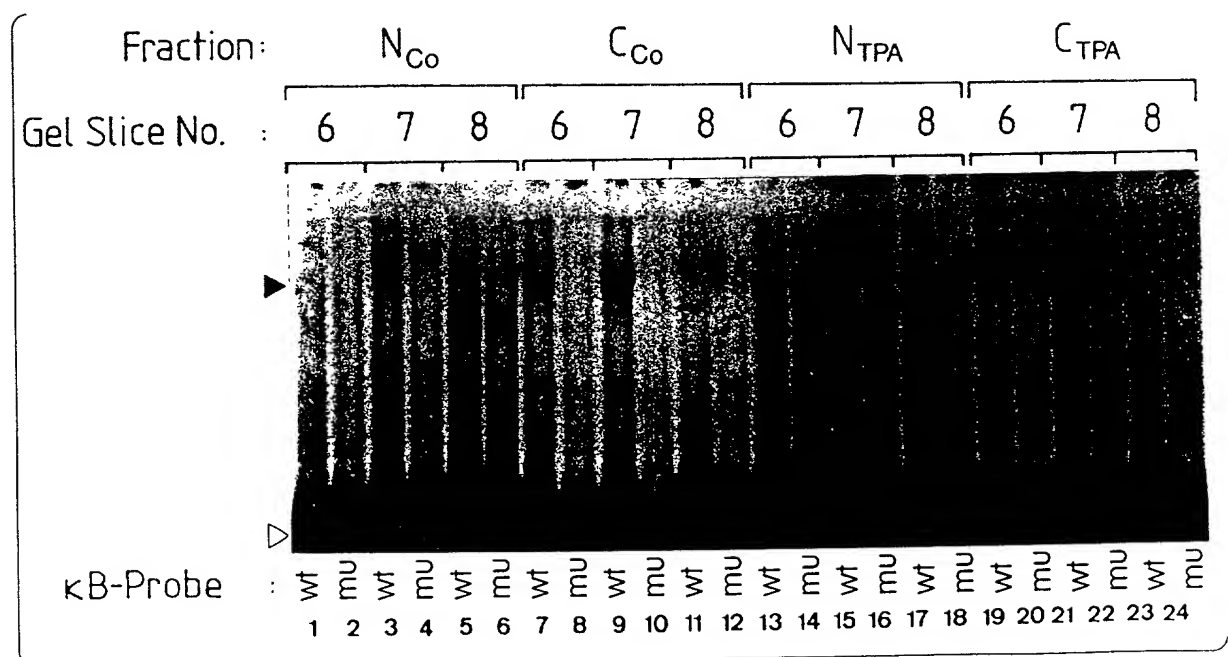


Fig. 30

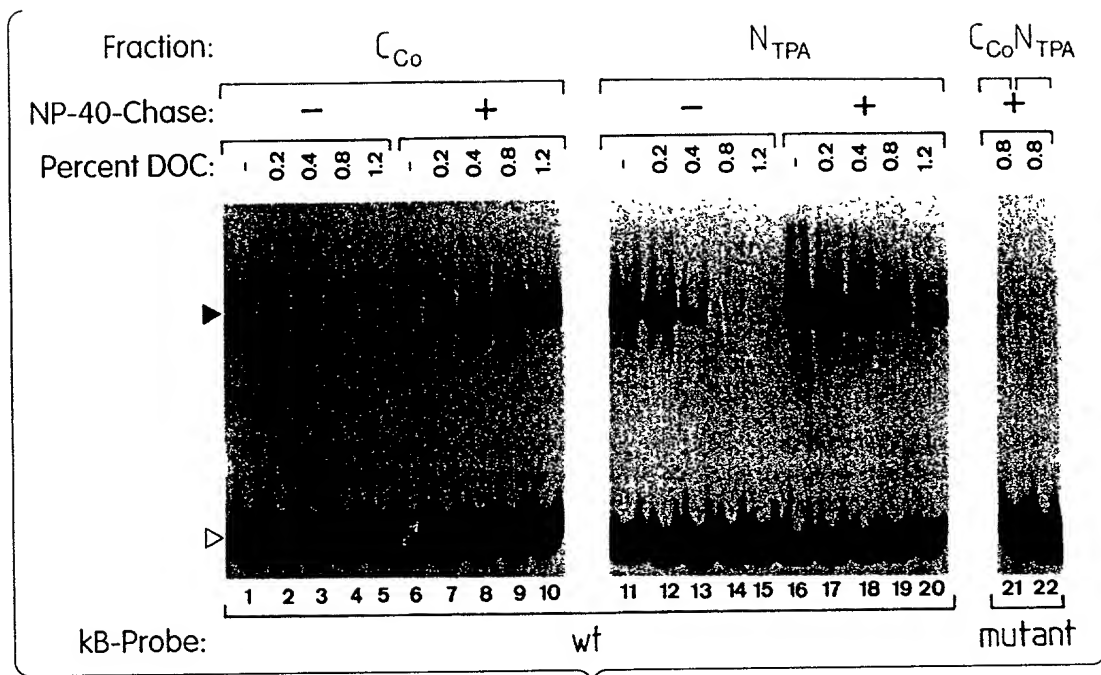


Fig. 31A

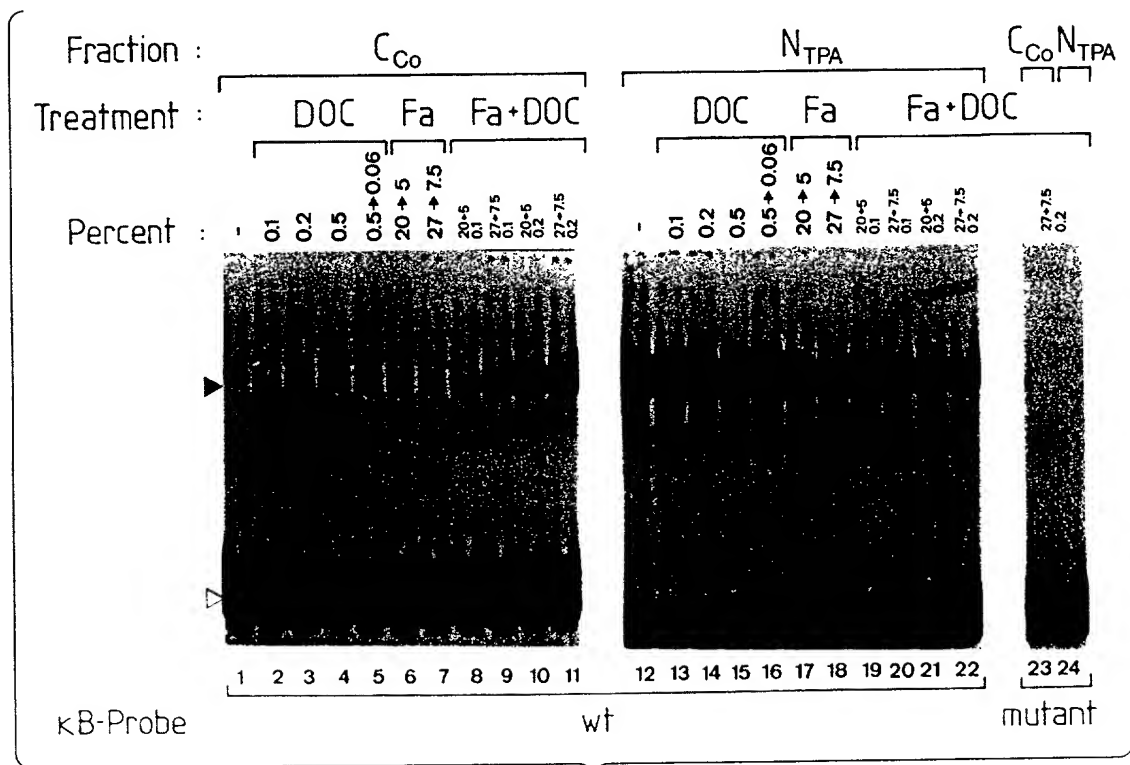


Fig. 31B

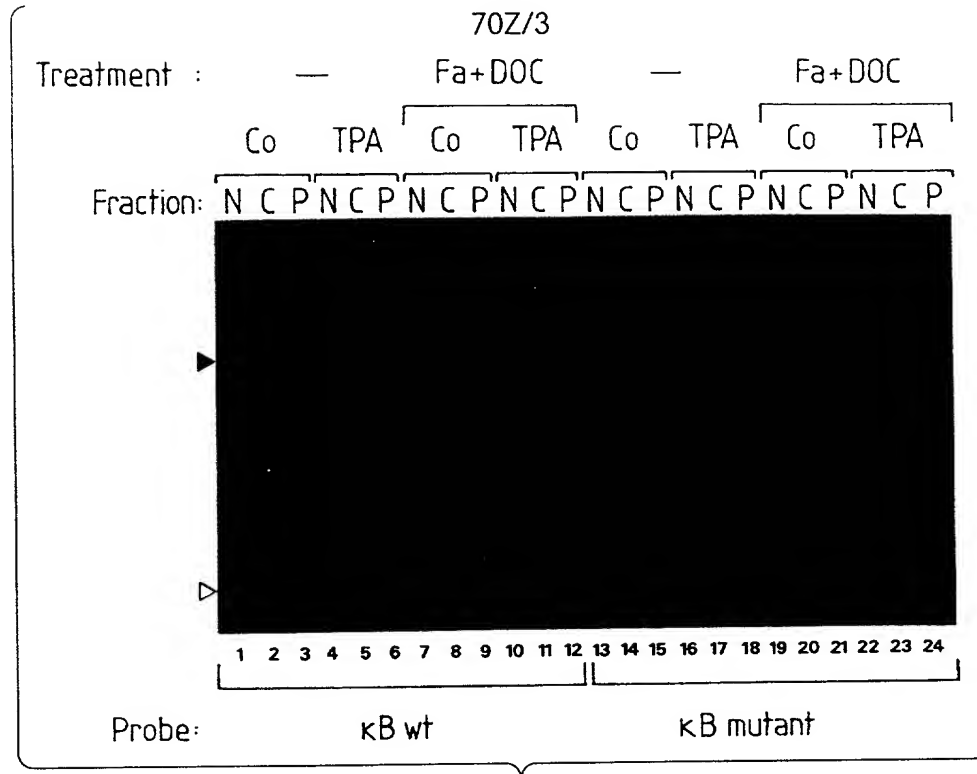


Fig. 32

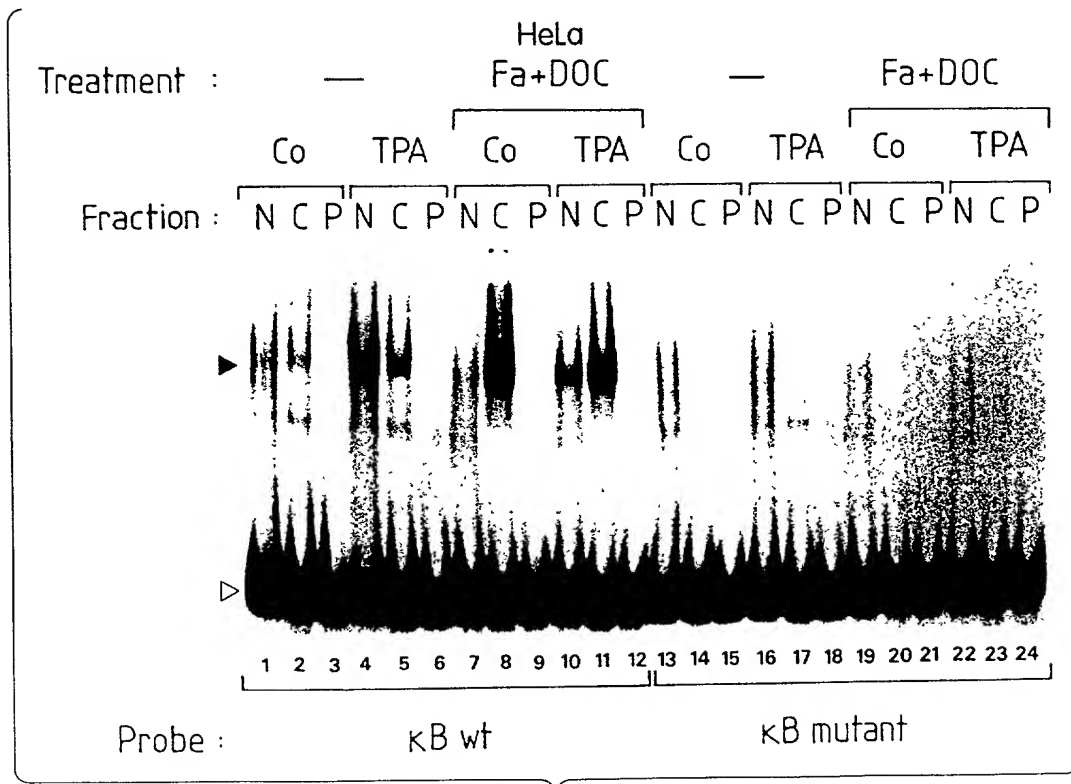


Fig. 33

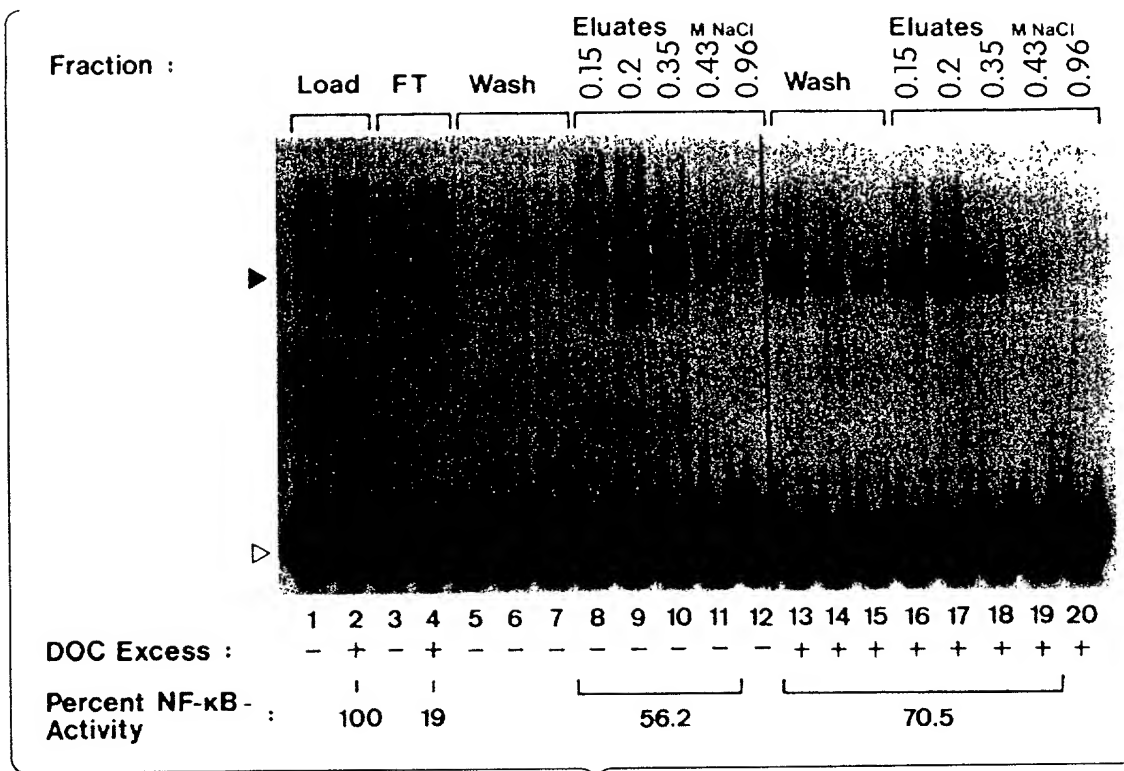


Fig. 34A

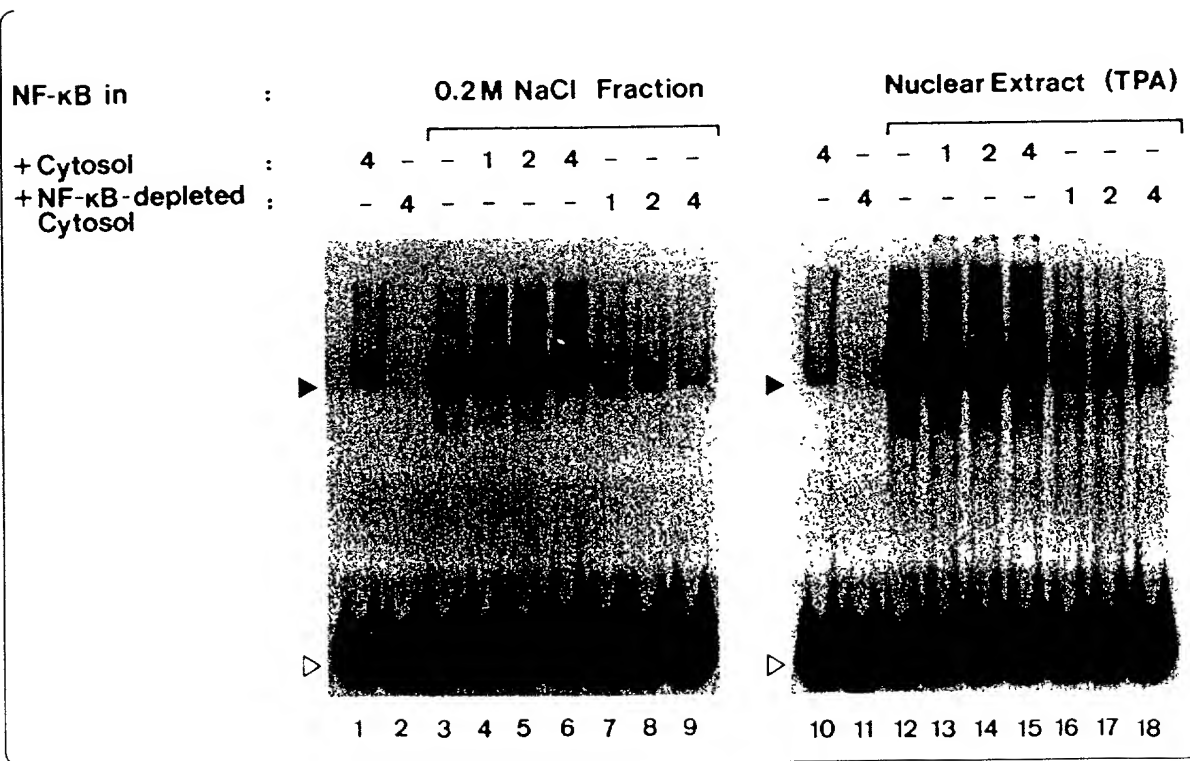


Fig. 34B

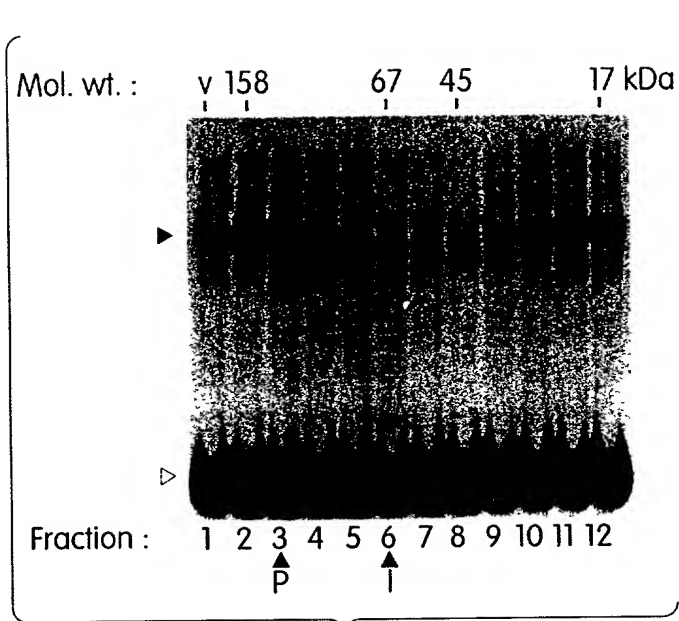


Fig. 35A

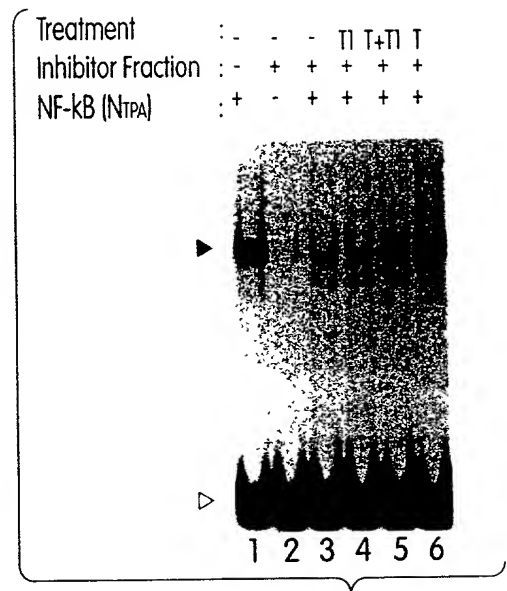


Fig. 35B

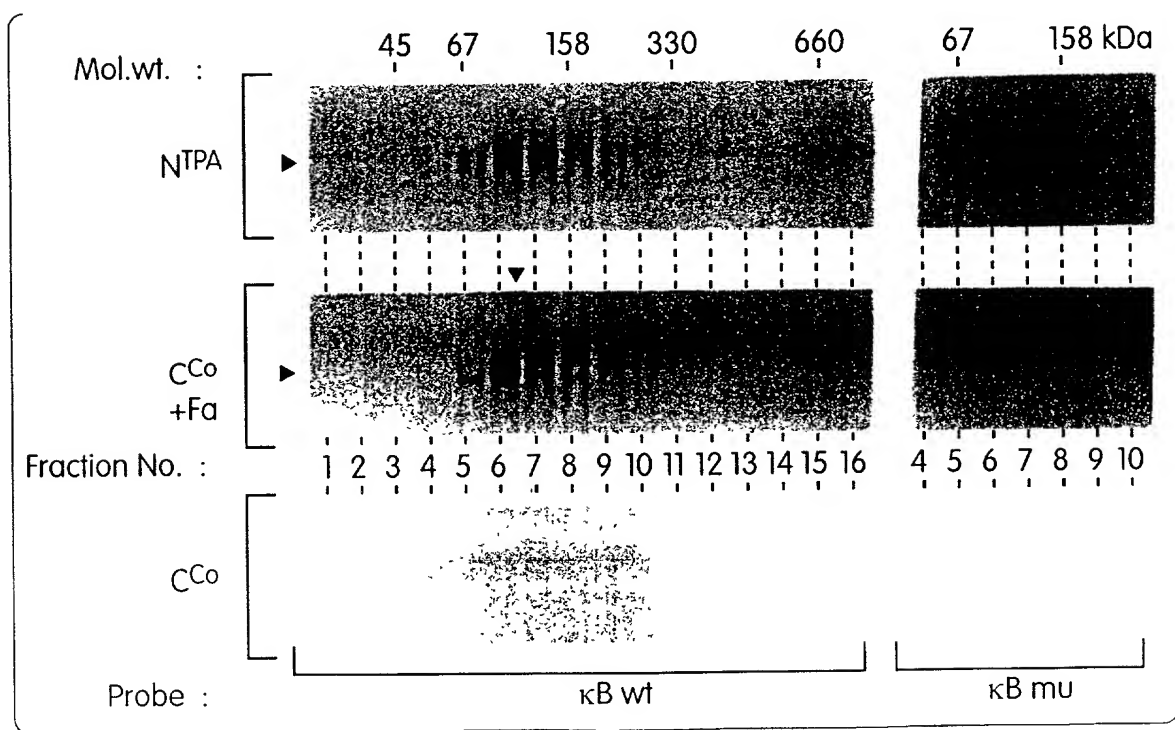
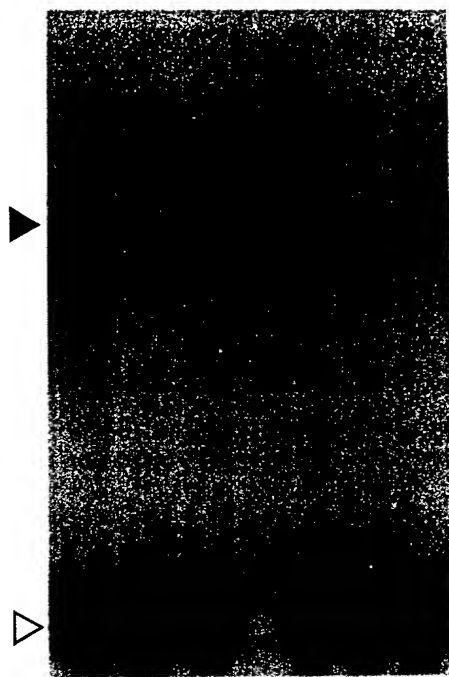


Fig. 35C

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NF- κ B (NTPA)	:	+	-	+	+	-	+
Inhibitor Fraction	:	-	+	+	-	+	+



1	2	3	4	5	6
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DOC Treatment	:	-	+
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Fig. 36A

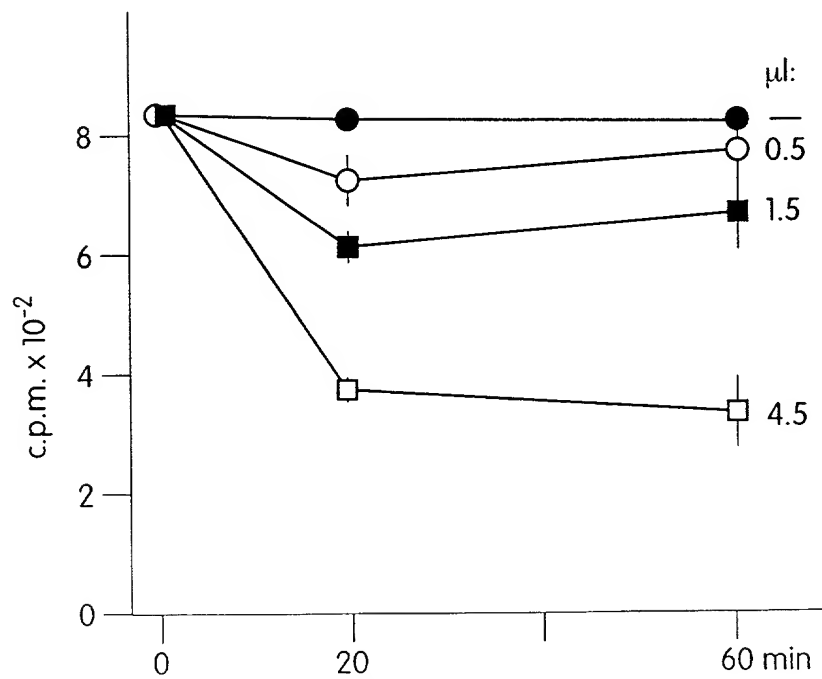


Fig. 36B

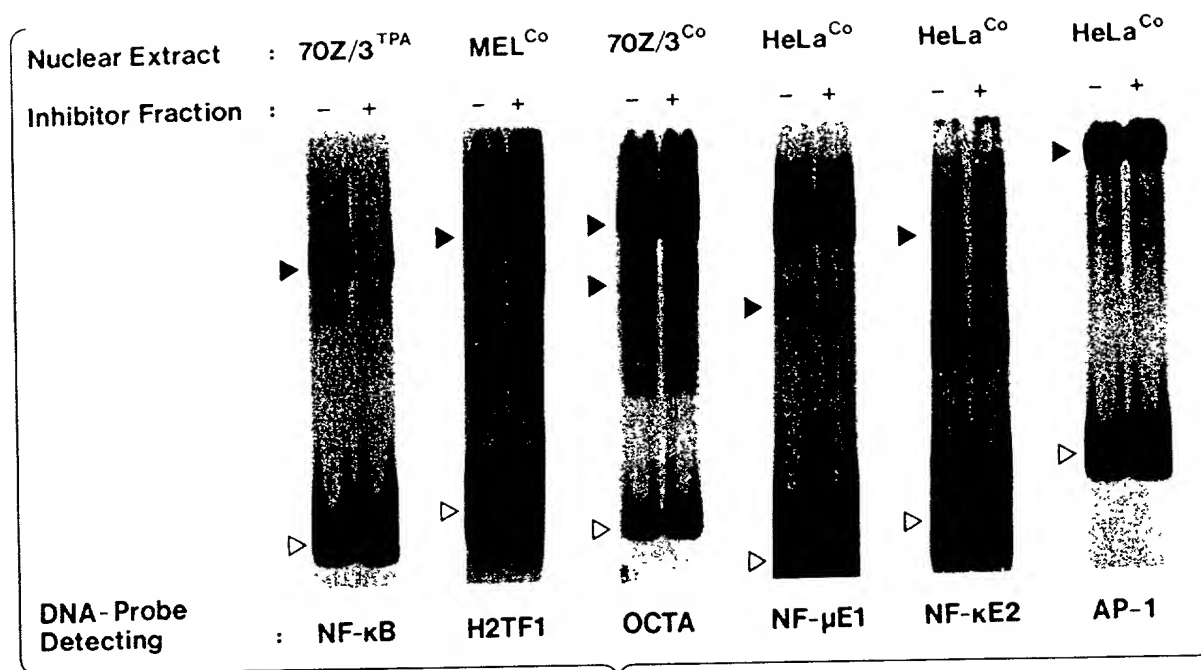


Fig. 37A

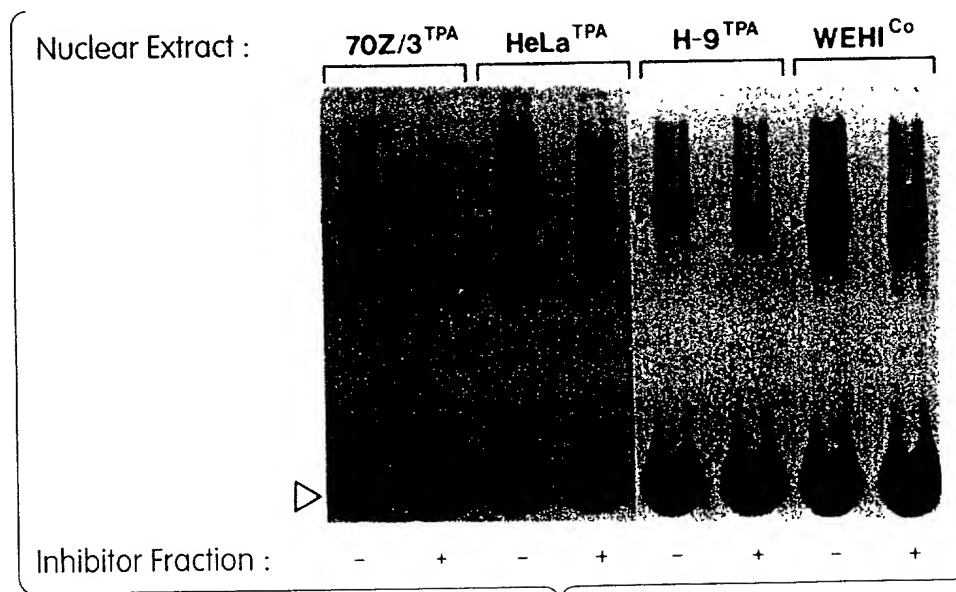


Fig. 37B

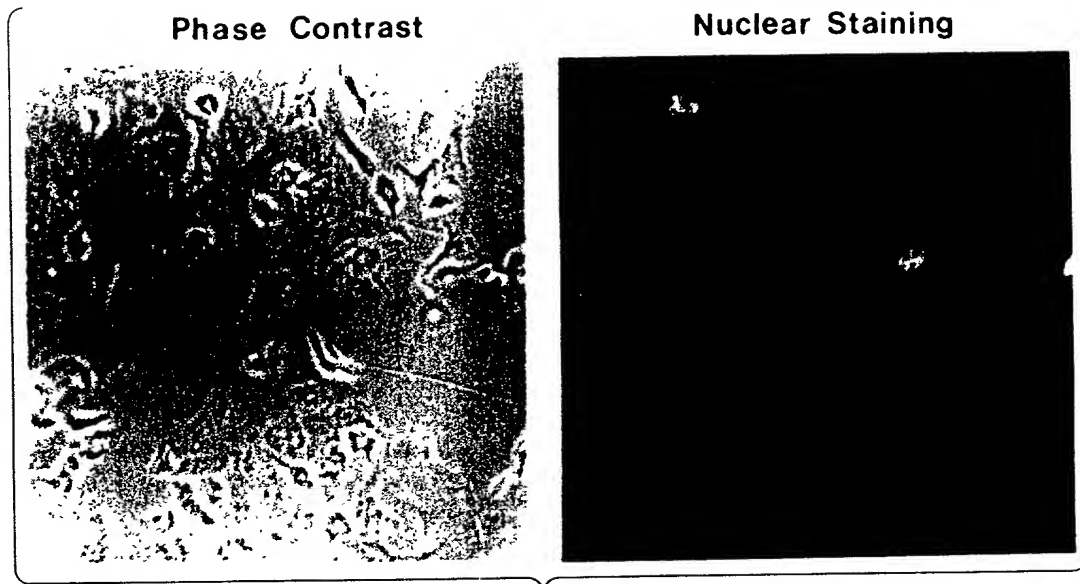


Fig. 38A

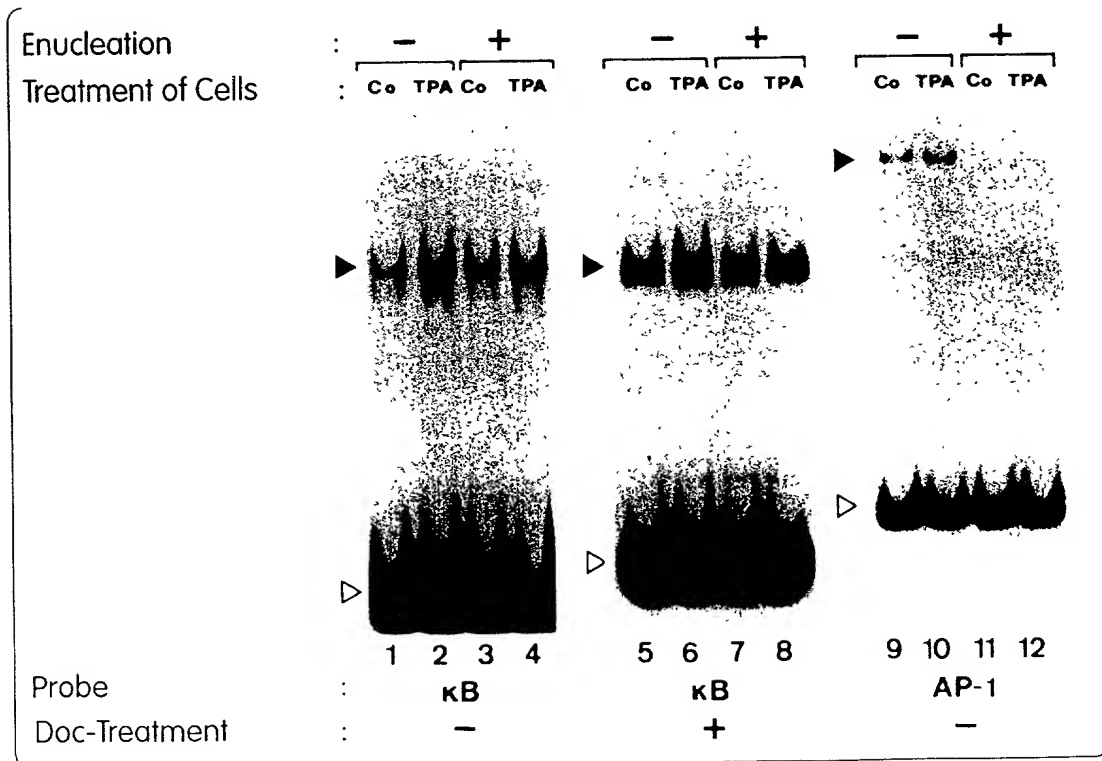


Fig. 38B

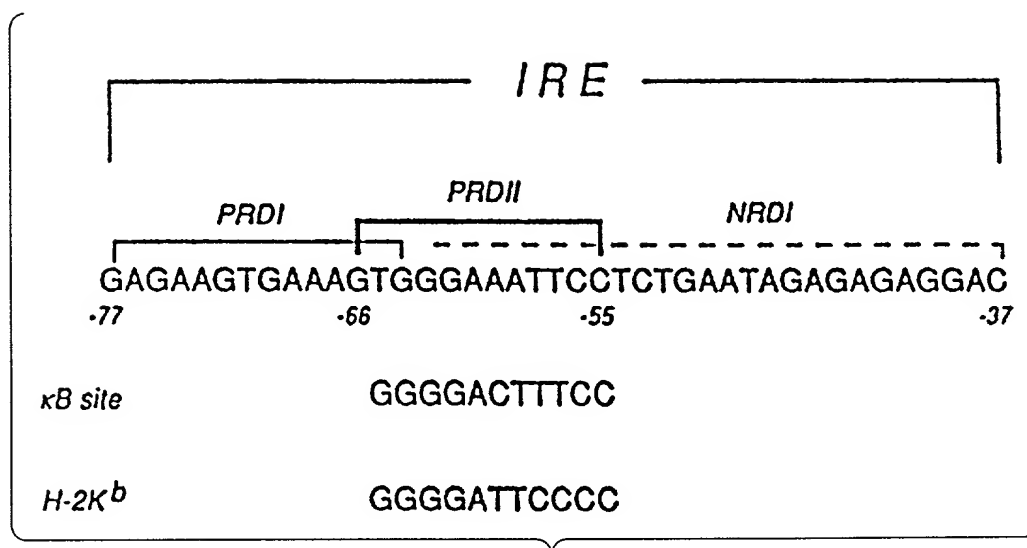


Fig. 39

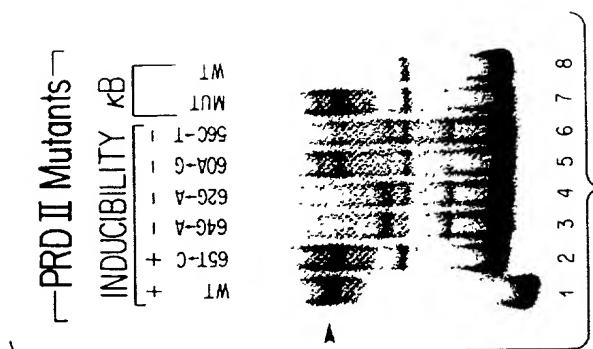


Fig. 40B

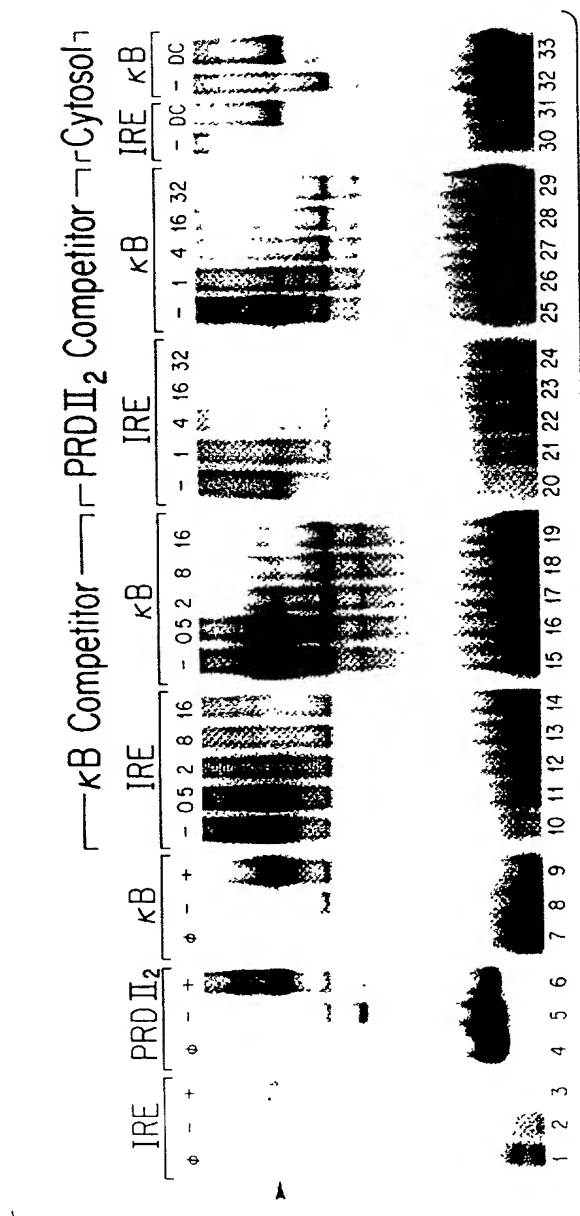


Fig. 40A



Fig. 41A

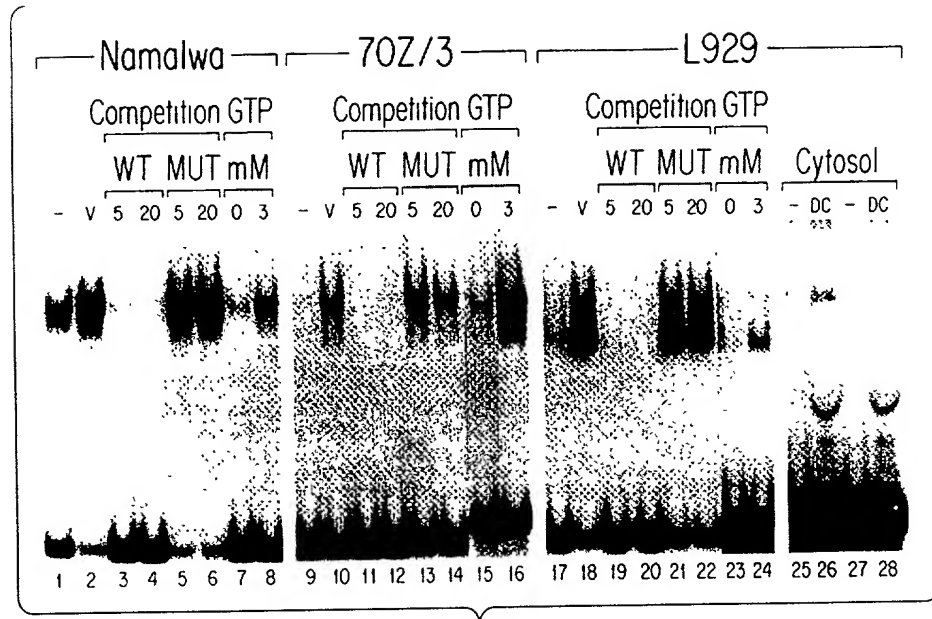


Fig. 42A

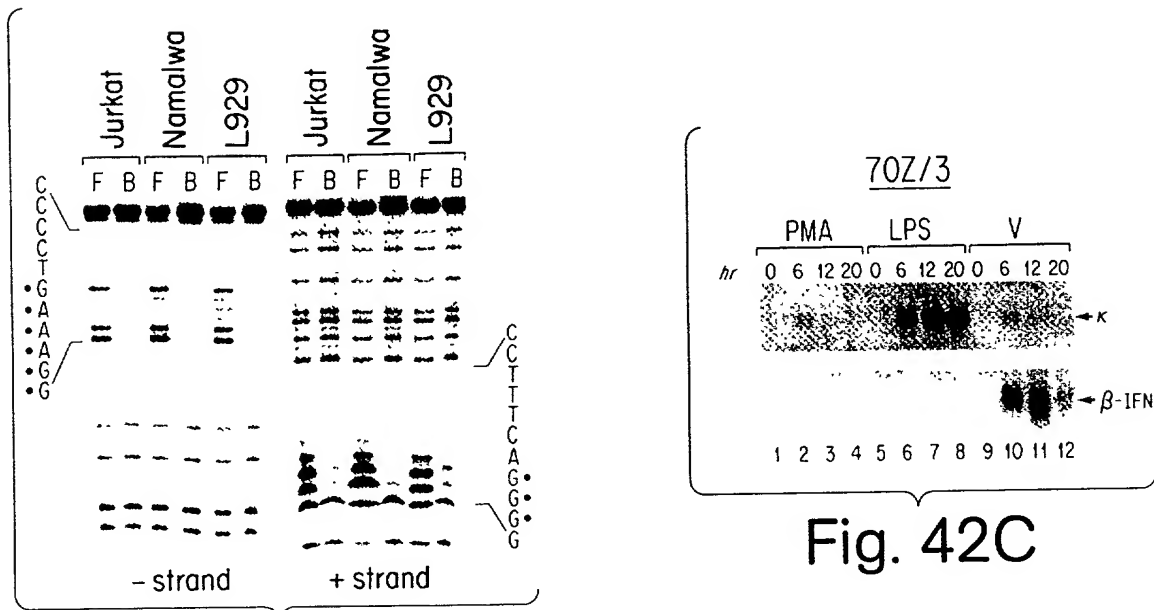


Fig. 42C

Fig. 42B

Figure 43

AAACATTGCAACCTTATAAAAAATTAACTATTTGACAAATGCCGCAGAAGAAATTTCTGTGTTTAGGTGCTGTGGG
AAAAACATATCTCCAGCTTGAGTTTGTAGCATCACAGAACCACTTGATGAAATCACACACAGAACCAAGTAGAGG
AGGCAACTGTGAATCGTGGGCTATAAAGCCATCAAGGATCTGATGAAGAACC CGGAGACGAACCCCCACC
CCCCACAACAGGATCGGCACCCAGAGTTCAACAAGTGGCTGACTTTGTTAAACACTACGTGGGAACCCATAGTC
CCGGATCAGTAGTTGCACAGCCCCCTCCCGACAGACTACACCGCTGTTTGTGATCCTTGCCCAACCCATGCTCT
CCTCCAGGCCCCGTTCTGCTCCTGTCCTCGGCGCTGGATTGAACCGCACACAAGTCTGCATCTGGCACGAA
TTCTCATGGAGCCACGTATGAGGTACGTGTTGCACACCTATCACAGAAGTCTTGCAGTTCTGACTCTCCTGA
GCTCGGTGGAAAGTCTGATAGTACCTCCCTCTCCTGCCACAAAAGCAGCCCTCACATTACAAGTTTCCAAG
CAGGTCTATTGAGTTTCTCTTCAGAGCGAGCCTTTGTCAAAACACACCTGGAGGGGAGTCTCACCTCTCCCCAGC
AACTCAGATCAGTGCCTTATTTTAATGCTCGGCCAATCCTGAGGTGCTGCTGGGTTTGTGGGCTGCGTTTGT
TGAACCTCCCCCTCCCCCAACGCCCTGGCATTTGCAATTAAACCTGGGATTCAGGGCCAAATTCAGAGCCCA
GAGTGAGCAGTAGGATGTGGAGCTCAAGCAGAGTTGCACCTGCTGACCCCGCCCTGAATTTGTTCAACCCAGAG
ACTACAAGTCAGAAAGGCATGTTTGAAGAAGGCATGCTAAGGACTGATGTGGAACGGCCAATTTGTCCCCACCA
GCACAGTGGGAAGGCTGGACAGAGAAGGAAGGATCCATAGAGATGTGAACCCAGAAATCAGTCGTGTGAGC
TCTGGGTATATCACTACATGTTTAACTCTTGCAAGACC GTTTGCCCAGGGCTTTGGTACCCACAGGGTTAGAGTTAC
ATTAACCAACCAACACAGAGAGGAACTGAGGTTTATGACCCCCCCCCCCCCCAAGGTTAGATTTCTGCCGAGTATA

AAGGGGGGGAAGGGGGGGCTTGGTTTCATTTCCCTTCACCTGTGTGACCGAAGTTTGTCTTTATTTGTAACA
 K G G E G G G P W F I S L H C V T E V L L L F V N I
 TCTTGAATTACCCGTCGTTTCCAGTCTTCATCGTGTGTCAGGCCACTGGAGGGAATTCCCCGTCTCGGAAC
 L N Y P S F S S L H R A V V R P L E G I P R L G T
 GCCGGCCGACAGCAGCCGCGCGCCGCCAGCTCCGCCGCCATGCTCAGCGCCACCGCCCCGCC
 P P P A P A A P R R P A S S A A M L S A H R P A

Figure 43 (continued)

GAGCCGCCCGCTGGAGGCTGGAGCGCCGCGCAAGGAACGGCGGGGTGTGCCGCCGACGACCGCC
 E P P A V E G C E P P R K E R Q G G L L P P D D R H

ACGACAGCGGGCTGGAATCCATGAAGGAGGAGGAGTACAGGAGCTGGTGGGAGCTGGAGGACATCCGCTGCA
D S G L D S M K E E Y R Q L V R E L E D I R L Q

GCCCCGAGCGCCCGCCGACGCTGGGCCAGCAGCTCACGAGGACGGCGACACTTTTCTCCACTTG
 P R E P P A R P H A W A Q Q L T E D G D T F L H L

GCGATCATTCAGAGGAAAGGCCCTGAGCCTGGAGTGATCCGGCAGGCCGCTGGGACGCCCTTCCCTGAAC
 A I I H E E K A L S L E V I R Q A A G D A A F L N F

Ank. I
 TCCAGAACAACCTCAGCCAGACTCCGCTCCACCTGGCGGTGATCAGGACGAGCCGAAATCGCCGAGCACCTGCT
Q N N L S Q T P L H L A V I T D Q A E I A E H L L

Ank. II
 GAAGGCTGGCTGGATGTCAGGACTTCCGTGGGAACACCCCGCTCCACATCGCCTGCCAGGCGCTCG
K A G C D L D V R D F R G N T P L H I A C Q Q G S

Ank. III
 CTCCGCGAGGTCAGTCTCAGCAGCACTGCCAGCCCCACCTCCTCGCCGTCCTGCAGGCCACCACTACA
L R S V S V L T Q H C Q P H H L L A V L Q A T N Y N

ACGGCCATACATGTCTCCATTGGCATCTATTCAAGGATACCTGGCTGTGCGAATACCTGTCTTAGGAGC
G H T C L H L A S I Q G Y L A V V E Y L L S L G A

Ank. IV
 AGATGTAATGCTCAGGAGCCATGCAATGGGAGAACAGCACTACACTTGGCCGTAGACCTTCAGAACTCAGACCTG
D V N A Q E P C N G R T A L H L A V D L Q N S D L

Ank. V

Figure 43 (continued)

GTGTCAC	TTC	TGGTGA	AAACAC	GGGGCC	CAGATGT	GAACAA	AGTGAC	CTACCA	GGGCTAC	CCCCAT	ACCAGC	TTACAT													
V	S	L	L	V	K	H	G	P	D	V	N	K	V	T	Y	Q	G	Y	S	P	Y	Q	L	T	W

GGGCAG	AGACA	ACGCC	CAGCAT	ACAGG	AGCAG	CTGA	AGCTGA	AGCCAC	AGCTG	ACCTG	ACAG	ATACT	GCCCC	GAAAGT
A	E	T	T	P	A	Y	R	S	S				354	

GAGGATGAGGAGAGCAGTGAATCAGAGCCAGAGTTCACAGAGGATGAACCTTATGTATGATGACTGCTGTATTGGAG
 GAAGACAGCTGACATTTTAAAGCAGAGGTTTCTGTGAGAAAGTGACTGTGTACATATGTATAGGAAAAAGCCCTGA
 CTTTCTTCATTTAAAGAAAGTCTATACTCGAAGGAGAAAAAGTACTGAGATACTACACTGCCAGCCAGGAGC
 ACATCATGCTAACAGGTTCCATGCTCTGACCTGTACTTAAGTAACGGGATGGGATGTAAACATCGTTAAGAGATC
 AGTGAACATGCACACCATCTGATAAAGAGCCACGTTATCTAATTTCTCTGCCACATGAGGATAACGGACTGCACGT
 CCAATGTGCTGTTGTCAAGAAATGCCGTTTGAGAGCTGCCCTTGTCACACTAAGTGTGTGAGGAGTGTCTCATCCCCCT
 CGGTGGCAAGACAGGCTTGCACAAACGTCCTCATCTGCTTGAAGACTGTGAGGTTGGCATTAGGTTGAGGCACGTCT
 GTGCCCTGCTCCCTGACCTGGCTGCTCAGGGTTGAGGAGTCCGACCATGGGAGAGGTGACCTGGCTGCTGGGAGG
 AAGGTAGCAATGATGTTAACTGTGGGCATTTGGAAACTGTGTGTTTCACACCATGTGTGCATAATTGCTACACTT
 TTTAGCAACTGTATAGAATGTAAATACTGTACATCTTTGTTTATAAATTATTTGGTACCTGTGAGATATGTATTTA
 TTAAAAAAGGCAGATTCTGTAAAAA